NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR-
141833

(NASA-CR-141833) AN INVESTIGATION IN THE MSFC TWT TO DETERMINE SPOILER EFFECTS ON WING LOADS AND ELEVCN HINGE MOMENTS UTILIZING 0.004-SCAIE MODELS (77-0 AND 74-OTS) OF THE SHUTTLE VEHICLE 5 (Chrysler

N76-16136
HC $19.75
Unclas
G3/18 08581

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

October, 1975

DMS-DR-2253
NASA CR-141,833

AN INVESTIGATION IN THE MSFC TWT TO DETERMINE SPOILER EFFECTS ON WING LOADS AND ELEVON HINGE MOMENTS UTILIZING 0.004-SCALE MODELS (77-0 AND 74-OTS) OF THE SHUTTLE VEHICLE 5 CONFIGURATION (IA125)

by

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Prepared under NASA Contract Number NAS9-1[illegible]247

by

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Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	MSFC TWT 622
NASA Series Number:	IA125
Occupancy Hours:	123
Date:	April 28 - May 22, 1975

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Chrysler Corporation Space Division assumes no responsibility for the data presented other than display characteristics.

AN INVESTIGATION IN THE MSFC TWT TO DETERMINE SPOILER EFFECTS ON WING LOADS AND ELEVON HINGE MOMENTS UTILIZING 0.004-SCALE MODELS (77-0 AND 74-OTS) OF THE SHUTTLE VEHICLE 5 CONFIGURATION (IA125)

by E. C. Allen, Rockwell International

ABSTRACT

This report presents information for wind tunnel tests (IA125) of a 0.004-scale orbiter, external tank, and sol d rocket motor integrated vehicle model (77-0 and 74-OTS) in the MSFC Trisonic Wind Tunnel.

These tests were conducted in support of MCR's 1344 and 1346. Data from these tests provide spoiler effects on wing bending/torsion and elevon hinge moments, elevon effectiveness data and the influence of solid plumes from Mach numbers of 0.6 through 2.74 at angles of attack and sideslip from -10 through 10 degrees.

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NOMENCLATURE

SYMBOL	PLOT SYMBOL	DEFINITION
A_{b_e}		tank base area, in.^{2}
A_{b_o}		orbiter base area, in.^{2}
A_{b_s}		SRB base area, in.^{2}
b_{ref}	BREF	reference span, in.
$\bar{c}$		mean aerodynamic chord, in.
$\bar{c}_e$		elevon reference length
c.g.		center of gravity
CAB_E	CABE	tank base axial force coefficient
CAB_O	CABO	orbiter base axial force component coefficient
CAB_S	CABS	SRB base axial force coefficient
C_{A_f}	CAF	forebody axial force coefficient
C_{A_T}	CA	total axial force coefficient
C_{B_W}	CBW	wing root bending moment coefficient
$C_{h_{e_I}}$	CHEI	inboard elevon hinge moment coefficient
$C_{h_{e_O}}$	CHEO	outboard elevon hinge moment coefficient
C_ℓ	CBL	rolling moment coefficient in body axis system
C_m	CLM	pitching moment coefficient
$C_{m_{BF}}$	CLMBF	pitching moment coefficient due to body flap
C_{mU}	CLMU	uncorrected pitching moment coefficient
HM_{e_O}		outboard elevon hinge moment
HM_{e_I}		inboard elevon hinge moment

NOMENCLATURE (Continued)

SYMBOL	PLOT SYMBOL	DEFINITION
C_n	CYN	yawing moment coefficient in the body axis system
C_N	CN	normal force coefficient in the body axis system
C_{N_W}	CNW	wing normal force coefficient
CN_{BF}	CNBF	body flap normal force coefficient
CNB_O	CNBO	normal force component coefficient of orbiter base drag
C_{N_U}	CNU	uncorrected normal force coefficient
CPB_{BF}	CPBBF	body flap base pressure coefficient
CPB_E	CPBE	tank base pressure coefficient
CPB_O	CPBO	orbiter base pressure coefficient
CPB_S	CPBS	SRB base pressure coefficient
C_Y	CY	side force coefficient (body or stability axis system)
C_{T_W}	CTW	wing torsion moment coefficient
ΔC_{A_f}	DCAF	incremental forebody axial force coefficient due to elevon deflection
ΔC_{A_T}	DCA	incremental total axial force coefficient due to elevon deflection
ΔC_ℓ	DCBL	incremental rolling moment coefficient due to elevon deflection
ΔC_m	DCLM	incremental pitching moment coefficient due to elevon deflection
ΔC_n	DCYN	incremental yawing moment coefficient due to elevon deflection
i_b		average orbiter base slant angle

NOMENCLATURE (Continued)

SYMBOL	PLOT SYMBOL	DEFINITION
ΔC_N	DCN	incremental normal force coefficient due to elevon deflection
ΔC_Y	DCY	incremental side force coefficient due to elevon deflection
F_A		axial force, lb.
F_N		normal force, lb.
F_{N_W}		wing normal force, lb.
F_Y		side force, lb.
i_o	ORBINC	orbiter/ET incidence angle
ℓ_{ref}	LREF	reference length, in.
M	MACH	Mach Number
MRP	MRP	moment reference point
	XMRP	moment reference point on x-axis
	YMRP	moment reference point on y-axis
	ZMRP	moment reference point on z-axis
M_{B_W}		wing bending moment, in.-lb.
M_{T_W}		wing torsion moment, in.-lb.
M_x		rolling moment in the bpdy axis system, in-lb.
M_y		pitching moment in the body (or stability) axis system, in.-lb.
M_z		yawing moment in the body axis system, in.-lb.
$\delta_{e_{ref}}$		elevon reference area

NOMENCLATURE (Continued)

SYMBOL	PLOT SYMBOL	DEFINITION
P		static pressure, psi
$P_{b_{bf}}$		body flap base pressure
P_{b_e}		tank base pressure
P_{b_o}		orbiter base pressure
P_{b_s}		SRB base pressure
P_t		total pressure, psi
q	Q(PSI)	dynamic pressure, psi
RN/L	RN/L	Reynolds number per unit length, million/ft.
S_{ref}	REFS	reference area, in.^{2}
$S_{bf_{ref}}$	BFREFS	body flap reference area, in.^{2}
T	temperature	temperature, ^{o}F
X_o		orbiter longitudinal station
Y_o		orbiter lateral station
α	ALPHA	angle-of-attack, angle between the projection of the wind X_w-axis on the body X, Z-plane and the body X-axis; deg.
β	BETA	sideslip angle, angle between the wind X_w-axis and the projection of this axis on the body X, Z-plane; deg.
δ		control surface deflection angle, deg.
δ_a	AILRON	aileron - left aileron trailing edge down
Z_o		orbiter vertical station

NOMENCLATURE - (Continued)

SYMBOL	PLOT SYMBOL	DEFINITION
δ_{BF}	BDFLAP	body flap deflection angle
$\delta_{e_{IL}}$	ELV-IL	left inboard elevon deflection angle
$\delta_{e_{OL}}$	ELV-OL	left outboard elevon deflection angle
$\delta_{e_{IR}}$	ELV-IR	right inboard elevon deflection angle
$\delta_{e_{OR}}$	ELV-OR	right outboard elevon deflection angle
δ_{SB}	SPDBRK	speed brake
δ_R	RUDDER	rudder - trailing edge left
$\delta_{F/2}$	SPOILR	elevon flipper door deflection

SUBSCRIPTS

Symbol	Definition
b_e	tank base
b_f	body flap
b_o	orbiter base
b_s	SRB base
t	total conditions
w	wind
ref	reference conditions
∞	free stream conditions

INTRODUCTION

This report presents data obtained in an investigation of the 0.004 scale model of the Shuttle Vehicle 5 configuration. The primary objective of the test was to evaluate mid-span elevon flipper door (used as a spoiler) effects on wing bending/torsion and elevon hinge moments during the launch phase of flight. A second objective of the test was to obtain elevon effectiveness data in expanded matrix form for elevon and wing load relief studies in support of MCR's 1344 and 1346. Additional data were obtained on the first and second stage configurations at Mach 4.48 with and without solid simulated SSME plumes at angles-of-attack from zero to 20 degrees.

For the wing loads portion of the test, the tank of the mated vehicle model was mounted on the sting-balance combination. The right wing is balance mounted to the orbiter and provides wing normal force and bending and torsion moments. For that portion of the test which provided plume data and elevon hinge moments and elevon effectiveness data, the orbiter of the mated vehicle model was mounted on the sting-balance combination. The in-board and out-board elevons of the left wing were balance mounted to provide hinge moments.

MODEL DESCRIPTION

The model geometry (0.004-scale) is shown in Figure 2. Two orbiters were tested; one is a stycast casting and the other is made of stainless steel. The ET and SRB's are made of stainless steel.

The external tank of the mated vehicle model was mounted on the TWT 239 balance while wing loads were being measured. For the remainder of the test, the orbiter was mounted on the TWT 239 balance. In both cases, the balance was supported by the number 3 balance adapter and sting. The orbiter was mounted to the tank at three points simulating the forward attach point and the two main fuel lines for the rear attach points. The SRB's were attached to the ET. The orbiter model had positionable split elevons, rudders, speed brakes, and body flaps. For this test only the left wing inboard and outboard elevons were deflected. Semi-span elevon flipper doors located at a mid-span position were tested at 20 and 40 degree deflection angles.

Solid SSME plumes were fabricated and tested at M=4.48. The plume table of coordinates are listed in Table IV and an installation photograph is shown in Figure 3.

The right wing of the stycast orbiter model was balance mounted to the body and measured wing normal force, root bending and torsion moments. The elevon for the left wing of the steel orbiter model was split and the inboard and outboard sections were both instrumented to provide hinge moments.

The model was fabricated in conformance with the lines drawings as listed below:

Orbiter	VC70-000002
Forward Body and Cabin	VL70-000202C
Mid-body-wing/glove fairing	VL70-000200B
Aft Body	VL70-000203
Vertical tail	VL70-000146A
Wing tip	VL70-006092
OMS/RCS Pods	VL70-008410,008401
Tank	VC78-000002B
SRB	VC77-000002B

CONFIGURATIONS INVESTIGATED

The following nomenclature has been used to designate model parts. Model dimensional data sheets defining the various configuration designators are presented in Table III.

Component	Definition
Orbiter	
B62	fuselage - per VL70-000200B, 202C, and 203
C12	canopy - per VL70-000202C
E62	elevon, 6" gap - per VL70-000200, 00608, 006092
F10	body flap - per VL70-000200B
M16	OMS pods - per VL70-008410, 008401
N28	OMS nozzle - per VL70-008457
R5	rudder - per VL70-000146A
V8	vertical - per VL70-000146A
W127	wing - per VL70-000200B
Z_{14}	Elevon flipper door
Tank	
AT16	attach structure, front ORB/ET - per SK-H-4011
AT17	attach structure, left rear ORB/ET - per VL78-000062B
AT18	attach structure, right rear ORB/ET - per VL78-000062B

Component	Definition
Tank (Cont'd)	
FL5	LOX feed line ET/ORB - per VL78-000062A
FL6	LH_2 pressure line ET/ORB - per VL78-000062A
AT68	forward ORB/ET attach (i_o =0°) - per LMSC dwg. R80084
AT69	forward ORB/ET attach (i_o = 1.5°) - per LMSC dwg. R80084
FR6	umbilical door fairing support - per VL78-000062A
FL9	LH_2 feed line ET/ORB - per VL78-000062A
PT12	tank lightning rod - per VL78-000062A
PT13	LOX recirculation line - per VL78-000062A
PT14	LOX pressure line - per VL78-000062A
PT20	LOX pressure line and electrical conduit - per VL78-000062A
T20	tank - per VL78-000041C
SRB	
PS7	attach rings and rear structural ring - per VL77-000066
PS20	electrical tunnel - per VC77-000002
PS9	tie down structure - per VL77-000066
S22	SRB baseline - per VC77-000002

The various configuration components are illustrated by figure as indicated below:

1) Tank Protuberances, Figure 4

2) SRB Protuberances, Figure 5

3) Elevon Flipper Doors, Figure 6

Configurations and their test conditions are shown in Table II.

TEST FACILITY DESCRIPTION

The Marshall Space Flight Center 14" x 14" Trisonic Wind Tunnel is an intermittent blowdown tunnel which operates by high pressure air flowing from storage to either vacuum or atmospheric conditions. A Mach number range from .2 to 5.85 is covered by using two interchangeable test sections. The trisonic section permits testing at Mach 0.20 through 2.50 and the supersonic section permits testing at Mach 2.74 through 5.85. Mach numbers between .2 and .9 are obtained by using a controllable diffuser. The range from .95 to 1.3 is achieved through the use of plenum suction and perforated walls. Mach numbers of 1.44, 1.93 and 2.50 are produced by interchangeable sets of fixed contour nozzle blocks. Above Mach 2.50 a set of fixed contour nozzle blocks are tilted and translated automatically to produce any desired Mach number in .25 increments.

Air is supplied to a 6000 cubic foot storage tank at approximately -40°F dew point and 500 psi. The compressor is a three-stage reciprocating unit driven by a 1500 hp motor.

Tunnel flow is established and controlled with a servo-actuated gate valve. The controlled air flows through the valve diffuser into the stilling chamber and heat exchanger where the air temperature can be controlled from ambient to approximately 180°F. The air then passes through the test section which contains the nozzle blocks and test region.

Downstream of the test section is a hydraulically controlled pitch sector that provides a total angle of attack range of 20° (± 10°). Sting offsets are available for obtaining various maximum angles of attack up to 90°.

DATA REDUCTION AND PRESENTATION

All model forces and moments (measured by the balance 239) were resolved in the body axis system and presented in the form of nondimensional coefficients. Data were corrected for weight tares and sting deflections. Coefficients were nondimensional as shown below.

Main Balance Coefficients

$$CNU = \frac{F_N}{qS_{ref}}$$, normal force coefficient uncorrected for base pressure forces

$$CN = CN_U - CNB_O - CN_{BF}$$, normal force coefficient corrected for orbiter base pressure acting on the orbiter base and body flap

$$CA = \frac{F_A}{qS_{ref}}$$, total axial force coefficient.

$$CAF = CAT - CAB_O - CAB_S - CAB_E$$, forebody axial force coefficient.

$$CY = \frac{F_Y}{qS_{ref}}$$, side force coefficient

$$CLMU = \frac{M_y}{qS_{ref}\ell_{ref}}$$, pitching moment coefficient uncorrected for base pressure forces.

$$CLM = C_{m_0} + CNB_0 \frac{X_1}{\ell_{ref}} + CN_{BF} \frac{X_2}{\ell_{ref}} - CAB_0 \frac{Z_1}{\ell_{ref}},$$

pitching moment coefficient corrected for orbiter base pressure acting on the orbiter base and body flap.

$$CLMBF = CN_{BF} \frac{X_2}{\ell_{ref}}$$, pitching moment coefficient due due to body flap

$$CYN = \frac{M_z}{qS_{ref}\ \ell_{ref}}$$, yawing moment coefficient

$$CBL = \frac{M_x}{qS_{ref}\ \ell_{ref}}$$, rolling moment coefficient

$$CNBO = -CPB_0 \frac{A_{b_o}}{S_{ref}} \tan i_b$$, normal force component coefficient of orbiter base drag

$$CNBF = -CPB_{BF} \frac{S_{bf_{ref}}}{S_{ref}}$$, body flap upper surface normal force coefficient

$$CABO = -CPB_0 \frac{A_{b_o}}{S_{ref}}$$, axial force component coefficient of orbiter base drag

$$CABS = -CPB_S \frac{A_{b_s}}{S_{ref}}$$, SRB base axial force coefficient

$$CABE = -CPB_E \frac{A_{b_e}}{S_{ref}}$$, tank base axial force coefficient

where:

$$CPBO = \frac{P_{b_o} - P_\infty}{q}$$, orbiter base pressure coefficient

$$CPBS = \frac{P_{b_s} - P_\infty}{q}$$, SRB base pressure coefficient

$$CPBE = \frac{P_{b_e} - P_\infty}{q}$$, tank base pressure coefficient

$$CPBBF = \frac{P_{b_{bf}} - P_\infty}{q}$$, body flap upper surface pressure coefficient

i_b = 14° - 45' , average orbiter base slant angle

X_1 = 5.052 in., axial moment arm for orbiter base drag

X_2 = 5.319 in., axial moment arm for body flap

Z_1 = 1.344 in., vertical moment arm for orbiter base drag

For balance location with respect to the MRP, see Figure 2.

Wing Balance Coefficients

$$CNW = \frac{F_{N_W}}{qS_{ref}}$$, wing normal force coefficient

$$CBW = \frac{M_{B_W}}{qS_{ref}\, b_{ref}}$$, wing root bending moment coefficient

for YMRP @ Y_o = 105 in.

Wing Balance Coefficients (Continued)

$$CTW = \frac{M_{T_W}}{qS_{ref}\,\bar{c}}$$, wing torsion moment coefficient

for XMRP @ X_o = 1307 in.

Elevon Hinge Moments

Outboard

$$CHEO = \frac{HM_{eo}}{qS_{e_{ref}}\,\bar{c}_e}$$

Where: CHEO = outboard elevon hinge moment coefficient

HM_{eo} = outboard elevon hinge moment

$S_{e_{ref}}$ = elevon reference area

$\bar{c}_e$ = elevon reference length

Inboard

$$CHEI = \frac{HM_{ei}}{qS_{e_{ref}}\,\bar{c}_e}$$

where: CHEI = inboard elevon hinge moment coefficient

HM_{ei} = inboard elevon hinge moment

Model reference dimensions used in the data reduction are:

PARAMETER	FULL SCALE	MODEL SCALE
Reference Areas		
S_{ref} (wing)	2690.00 ft.^{2}	6.198 in.^{2}
$S_{bf_{ref}}$	142.60 ft.^{2}	0.329 in.^{2}
$S_{e_{ref}}$	210.00 ft.^{2}	0.484 in.^{2}
Reference Lengths		
$\bar{c}$ (m.a.c.)	474.8 in.	1.899 in.
ℓ_{ref} (body length)	1290.3 in.	5.161 in.
b_{ref} (wing span)	1290.3 in.	5.161 in.
Moment Reference Point from ET base on ET C_L	1199.8 in.	4.799 in.
$\bar{c}_e$	90.7 in.	0.363 in.
Base Areas		
Orbiter (A_{b_o})	436.7 ft.^{2}	1.006 in.^{2}
Tank (A_{b_e})	597.6 ft.^{2}	1.377 in.^{2}
SRB (A_{b_s},2)	472.8 ft.^{2}	1.089 in.^{2}

TABLE I

TEST: IA-125 (TWT-622) DATE: 4/8/75

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per foot)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)	STAGNATION PRESSURE (pounds/sq inch)
0.6	5.0×10^6	4.35	100	22
0.8	6.0	6.45	100	22
0.9	6.2	7.36	100	22
1.0	6.5	8.14	100	22
1.05	6.6	8.72	100	22
1.10	6.6	9.29	100	22
1.15	6.7	9.99	100	22
1.2	6.7	10.68	100	22
1.25	6.8	11.38	100	22
1.46	6.5	9.47	100	22
1.96	7.0	10.20	100	28
2.99	4.0	5.19	140	30
4.96	4.8	3.07	140	90

BALANCE UTILIZED: MSFC 239

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	200 lbs.	± 1.0 lb.	± 0.15
SF	100 lbs.	± 0.5 lb.	± 0.08
AF	50 lbs.	± 0.25 lb.	± 0.04
PM	197 in. lbs.	± 1.0 in. lb.	± 0.18
RM	98 in. lbs.	± 0.5 in. lb.	± 0.09
YM	50 in. lbs.	± 0.2 in. lb.	± 0.05

COMMENTS:

Accuracy based on ± 0.5% of balance capacity.
Tolerance based on q 10 psi.

MSFC - Form 363-1 (Rev. April 1973)

TABLE II

TEST: [illegible]

DATA SET RUN NUMBER COLLATION SUMMARY

DATE: [illegible]

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_{elL}	δ_{elR}	δ_{erL}	δ_{erR}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	1.05	1.20	1.45	2.04					TEST RUN NUMBERS
RN001	74 DTS	A	0	0	0	0	0		68	69	71	70	135	160					
02		-5	0	0	0			5	131	130	128	129	133						
03		0	0	0	0			6	123	122	120	121	134	161					
04		5	0	0	0			6	124	125	127/1	126	132						
05		A	0	0	-5			6	75	74	72	73	136	159					
06				0	5				76	77	79	78	137	158					
07				0	10				83	82	80	81	138	157					
08				5	0				91	90	88	89	140	156					
09				5	10				84	85	87	86	139	155					
10				10	-5				99	98	96	97	142	151					
11				10	0				92	93	95	94	141	153					
12				10	10				100	101	103	102	143	154					
13				15	-5				115	114	112	113	145	150					
14				15	0				116	117	119	118	146	149					
15				10	5				107	106	104	105	144	152					
16				15	10				108	109	111	110	147	148					

1	7	13	19	25	31	37	43	49	55	61	67	75 76
CN	CLM	CY	CYN	CBL	CAF	CNBØ	CABØ	CABS	CABE			0

α OR β SCHEDULES

A) $\alpha = -10^\circ$ to 10° $\Delta\alpha = 2^\circ$

B) $\beta = -10^\circ$ to 10° $\Delta\beta =$

COEFFICENTS

C) $\alpha = 10^\circ$ to 30° $\Delta\alpha = 2^\circ$

IDVAR (1) IDVAR (2) NDV

TABLE II (Continued)

TEST: [illegible]

DATA SET RUN NUMBER COLLATION SUMMARY

DATE [illegible]

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES i_c	PARAMETERS/VALUES $\delta/2$			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.8	0.9	1.0	1.05	1.10	1.15	1.25	1.46			TEST RUN NUMBERS
RIN017	24DTE-ZIE	A	0	0	40			7	65	66	63	62	61	64	65				
018		C	E	0	40			6	56	57		57	60		58/1				
019		A	C	0	0			6	44	45	47	49	49	50					
020		C	E	0	0			5	55	54		52	51		53				
021	77Ø24TE+ZIE	A	C	0	20			7	18	16		7	20	21	17	41			
022	[illegible]	A	0	0	40			8	31	33	37	36	33	34	35	40/1			
023		0	E	0	20			6	27	26	24	23	22		25				
024		0	E	0	40			5	28	29		31	32		30				
025		A	0	0	0			8	1/1	2	4	5	6	7	3	42			
026		C	B	0	0			8	14	12	11	10/1	9	8	12	43			

1	7	13	19	25	31	37	43	49	55	61	67	75 76
CN	CLM	CY	CNN	CDL	CM	CNBQ	CPEQ	CPEB	CMBE			

COEFFICENTS

IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

TABLE II (Continued)

TEST: MSFC TWT 6-[illegible] | DATA SET RUN NUMBER COLLATION SUMMARY | DATE: [illegible]

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_{EI}	PARAMETERS/VALUES δ_{EO}			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	1.05	1.20	1.46	1.96	2.99	4.48	4.96		TEST RUN NUMBERS
RINO 27	74 ØTS	10	E	0	0			1							816	817	818		
28		20						1							814	813	815		
29		0						1							821	820	819		
30	74ØTS +PLUME	0						1								800/1			
[illegible]		10														801			
[illegible]		20														802			
33	74ØT	0														808			
34		10														809			
35		20														810			
36	74ØT +PLUME	0														807			
37		10														806			
38		20														805			
39		0	0													804			
40	74ØTS	0	0													803			
41	74ØTS	0	0													812			
42	74ØT	0	0													811			

1	7	13	19	25	31	37	43	49	55	61	67	75 76
CN	CLM	CY	CYN	CB	CA	CNBQ	[illegible]	[illegible]	[illegible]			

COEFFICENTS | IDVAR (1) | IDVAR (2) | NDV

α OR β SCHEDULES

TABLE II (Continued)

TEST: MSFC TWT 622 — DATA SET RUN NUMBER COLLATION SUMMARY — DATE: 5/21/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	1.05	1.20	1.46	2.74					TEST RUN NUMBERS
RIN101	74 ØTS	A	0	0	0	=	0	✓	68	69	71	70	135	160					
02		5	B	0	0			≤	131	130	128	129	133						
03		0	B	0	0			✓	123	122	120	121	134	161					
04		5	B	0	0			=	124	125	127/1	126	132						
05		A	0	0	-5			✓	75	74	72	73	136	159					
06				0	5				76	77	79	78	137	158					
07				0	10				83	82	80	81	138	157					
08				5	0				91	90	88	89	140	156					
09				5	10				84	85	87	86	139	155					
10				10	-5				99	98	96	97	142	151					
11				10	0				92	93	95	94	141	153					
12				10	10				100	101	103	102	143	154					
13				15	-5				115	114	112	113	145	150					
14				15	0				116	117	119	118	146	149					
15				10	5				107	106	104	105	144	152					
16				15	10	✓	✓	✓	108	109	111	110	147	148					

1 7 13 19 25 31 37 43 49 55 61 67 75 76

CNBF, CA, ELV-I, ELV-Ø, BETA, OR ALPHA

IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES — COEFFICENTS

α : A → $\alpha = -10°$ to $10°$ $\Delta\alpha = 2°$

β : B → $\beta = -10°$ to $10°$ $\Delta\beta = 2°$

TABLE II (Continued)

TEST: MSFC TWT 622

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 5/22/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES i_o	PARAMETERS/VALUES $\delta_f/2$			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.8	0.9	1.0	1.05	1.10	1.15	1.25	1.46			TEST RUN NUMBERS
RIN 17	74ΦTS + Z13	A	0	0	40			7	67	66	63	62	61	64	65				
18		0	B	0	40			5	56	57		59	60		58/1				
19		A	0	0	0			6	44	45	47	48	49	50					
20		0	B	0	0			5	55	54		52	51		53				
21	77Φ74TS + Z13	A	0	0	20			8	15	16	18	19	20	21	17	41			
22	(WING BAL)	A	0	0	40			8	39	38	37	36	33	34	35	40/1			
23		0	B	0	20			6	27	26	24	23	22		25				
24		0	B	0	40			5	28	29		31	32		30				
25		A	0	0	0			8	1/1	2	4	5	6	7	3	42			
26		0	B	0	0			8	14	13	11	10/1	9	8	12	43			

DATASETS 117–120: CNBF, CHEΦ, CHEI, CA / DATASETS 121–126: CNBF, CA

COEFFICENTS

α OR β SCHEDULES

IDVAR (1) IDVAR (2) NDV

TABLE II (Continued)

TEST: MSFC TWT 622

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 5/22/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_{EE}	PARAMETERS/VALUES δ_{EO}			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	1.05	1.20	1.46	1.96	2.99	4.48	4.96		TEST RUN NUMBERS
RIN 127	74 ØTS	10	B	0	0			3							816	817	818		
28		20						3							814	813	815		
29		0						3							821	820	819		
30	74ØTS +PLUME	0						1								800/1			
31		10														801			
32		20														802			
33	74ØT	0														808			
34		10														809			
35		20														810			
36	74ØT +PLUME	0														807			
37		10														806			
38		20														805			
39		C	O													804			
40	74ØTS	C	O													803			
41	74ØTS	C	O													812			
42	74ØT	C	O													811			

1 7 13 19 25 31 37 43 49 55 61 67 75 76

CNBF CLMEF CA ELV-ILE ELV-ØLA LFHA OR BETA

COEFFICENTS

α OR β SCHEDULES

IDVAR (1) IDVAR (2) NDV

TABLE II (Continued)

TEST: MSFC TWT 622 — DATA SET RUN NUMBER COLLATION SUMMARY — DATE: 5/22/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES x_0	PARAMETERS/VALUES $\delta f/2$	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.8	0.9	1.0	1.05	1.10	1.15	1.25	1.46
RIN22	77&74TS + Z13	A	0	0	20	8	5	16	18	19	20	21	17	41
22	(w/o Bal)	A	0		40	8	39	38	37	36	33	34	35	40/1
23		0	B		20	6	27	26	24	23	22		25	
24		0	B		40	5	28	29		31	32		30	
25		A	0		0	8	1/1	2	4	5	6	7	3	42
26		0	B		0	5	14	13	11	10/1	9	8	12	43

TEST RUN NUMBERS

1 7 13 19 25 31 37 43 49 55 61 67 75 76

CNW CBW CTW — 3

COEFFICENTS — IDVAR (1) — IDVAR (2) — NDV

α OR β SCHEDULES

TABLE III

MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - B_{62}

GENERAL DESCRIPTION : Configuration 140 C/D orbiter fuselage, MCR 200-B_4. Similar to 140 A/B fuselage except aft body revised and improved midbody-wing-boot fairing. X_o = 940 to X_o = 1040.

MODEL SCALE: 0.004

DRAWING NUMBER : VL70-000140C, -000202C, 000205A, -000200B, -000203A.

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (IML: Fwd Sta. X_o=238), In.	1290.3	5.161.
Length (OML: Fwd Sta X_o=235), In.	1293.3	5.173
Max Width(@ X_o = 1528.3), In.	264.0	1.056
Max Depth (@ X_o = 1464), In.	250.0	1.000
Fineness Ratio	4.899	4.899
Area - Ft^2		
Max. Cross-Sectional	340.885	0.0055
Planform		
Wetted		
Base		

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : CANOPY - C_{12}

GENERAL DESCRIPTION : Configuration140 C/D orbiter canopy, vehicle cabin No. 31 updated to MCR 200-R_4. Used with fuselage B_{62}.

MODEL SCALE: 0.004

DRAWING NUMBER VL70-000140C, -000202B, -000204

DIMENSIONS :

	FULL SCALE	MODEL SCALE
Length (X_o= 434.643-578), in.	143.357	0.573
Max Width (@ X_o = 513.127), In.	152.412	0.610
Max Depth (Z_o=501 to 449.39), In.	51.61	0.206
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: ELEVON - E_{62}

GENERAL DESCRIPTION: Split elevon, identical to E_{43} except the Y_o location of the mid-span elevon split line and gap width.

MODEL SCALE: 0.004

DRAWING No.: None

DIMENSIONS:	FULL SCALE	MODEL SCALE
Elevon Split:		
Right-hand at Y_o, in.	296.00	1.184
Left-hand at Y_o, in.	288.00	1.152
Elevon Gap		
Right-hand, in.	6.25	0.025
Left-hand, in.	6.75	0.027

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY FLAP - F_{10}

GENERAL DESCRIPTION : Configuration 140C/D body flap. Hingeline located at X_o = 1532, Z_o = 238.

MODEL SCALE: 0.0040

DRAWING NUMBER : VL70-000140C, VL70-355114

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X_o=1525.5 to X_o=1613), In.	87.50	0.350
Max Width (@ L.E., X_o = 1525.5), In.	256.00	1.024
Max Depth (X_o = 1532), In.	19.798	0.792
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional (@H.L.)	35.196	0.00056
Planform	135.00	0.0022
Wetted		
Base (X_o = 1613)	4.89	0.000078

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : OMS POD - M16

GENERAL DESCRIPTION : Configuration 140C orbiter OMS pod - short pod.

MODEL SCALE: 0.0040

DRAWING NUMBER : VL70-008401, VL70-008410 - plus ½" added to simulate TPS

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (OMS Fwd Sta X_o=1310.5), In.	258.50	1.034
Max Width (@ X_o = 1511), In.	136.8	0.547
Max Depth (@ X_o = 1511), In.	74.70	0.299
Fineness Ratio	2.484	2.484
Area - Ft^2		
Max. Cross-Sectional	58.865	0.0094
Planform		
Wetted		
Base		

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: OMS NOZZLES - M_{28}

GENERAL DESCRIPTION: Configuration 140A/B Orbiter OMS nozzles.

MODEL SCALE: 0.0040

DRAWING NUMBER: VL70-000140A (Location); SS-A00106, RELEASE 5 (Contour)

DIMENSIONS:	FULL SCALE	MODEL SCALE
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane		
Throat to Exit Plane		
Diameter - In.		
Exit		
Throat		
Inlet		
Area - ft^2		
Exit		
Throat		
Gimbal Point (Station) - In.		
~~Upper Nozzles~~ Left Nozzle		
X	1518.0	6.072
Y	- 88.0	- 0.352
Z	492.0	1.968
Right ~~Lower~~ Nozzles		
X	1518.00	6.072
Y	88.0	0.352
Z	492.0	1.968
Null Position - Deg.		
Left ~~Upper~~ Nozzle		
Pitch	15°49'	15°49'
Yaw	12°17'	12°17'
Right ~~Lower~~ Nozzle		
Pitch	15°49'	15°49'
Yaw	12°17'	12°17'

MODEL DIMENSIONAL DATA

MODEL COMPONENT: R5 - Rudder

GENERAL DESCRIPTION: 2A and 3 configuration per Rockwell lines VL70-000095 and VL70-000139

Scale Model = .004

DRAWING NUMBER: VL70-000139 VL70-000095

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area ~ Ft^2	106.38	0.00170
Span (equivalent) ~ IN.	201.0	0.8040
Inb'd equivalent chord	91.585	0.36634
Outb'd equivalent chord	50.833	0.20333
Ratio movable surface chord/ total surface chord		
At inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge	34.83	34.83
Tailing Edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (Normal to hinge line) Ft^3	526.13	0.00003
Product of area and mean chord		

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: VERTICAL - V_8

GENERAL DESCRIPTION: Configuration 140C/D orbiter vertical tail (identical to configuration 140A/B vertical tail).

MODEL SCALE: 0.0040

DRAWING NUMBER: VL70-000140C, -000146B

DIMENSIONS:	FULL SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) - Ft^2		
Planform	413.253	0.0068
Span (Theo) - In.	315.720	1.263
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.404	0.404
Sweep-Back Angles, Degrees.		
Leading Edge	45.000	45.000
* Trailing Edge	26.2	26.2
0.25 Element Line	41.130	41.130
Chords:		
Root (Theo) WP	268.500	1.074
Tip (Theo) WP	108.470	0.434
MAC	199.808	0.799
Fus. Sta. of .25 MAC	1463.50	5.854
W.P. of .25 MAC	635.522	2.542
B.L. of .25 MAC	0.000	0.000
Airfoil Section		
Leading Wedge Angle - Deg.	10.000	10.000
Trailing Wedge Angle - Deg.	14.920	14.920
Leading Edge Radius	2.00	0.008
Void Area	13.17	0.00021
Blanketed Area	0.00	0.000

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: WING-W

GENERAL DESCRIPTION: Configuration 140C/D orbiter wing, MCR 200-B4, similar to 140/B wing W_{14}, but with refinements: improved wing-boot-midbody fairing (X_0 = 940 to X_0 = 1040); elevon split line relocated from Y_0=281 to Y_0=312.5.

MODEL SCALE: 0.0040

TEST NO.

DWG. NO. VL70-000140C, -000200B

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2		
Planform	2690.00	0.043
Span (Theo In.	936.68	3.747
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	0.500	0.500
Aerodynamic Twist, degrees	3.000	3.000
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	-10.056	-10.056
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.0.0.	689.24	2.757
Tip, (Theo) B.P.	137.85	0.551
MAC	474.31	1.899
Fus. Sta. of .25 MAC	1136.83	4.547
W.P. of .25 MAC	290.58	1.162
B.L. of .25 MAC	182.13	0.729
EXPOSED DATA		
Area (Theo) Ft^2	1751.50	7.006
Span, (Theo) In. BP108	720.68	2.883
Aspect Ratio	2.059	2.059
Taper Ratio	0.245	0.245
Chords		
Root BP108	562.09	2.248
Tip 1.00 $\frac{b}{2}$	137.85	0.551
MAC	392.83	1.531
Fus. Sta. of .25 MAC	1185.08	4.744
W.P. of .25 MAC	294.30	1.177
B.L. of .25 MAC	251.77	1.007
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root $\frac{b}{2}$ =	0.113	0.113
Tip $\frac{b}{2}$ =	0.12	0.12
Data for (1) of (2) Sides		
Leading Edge Cuff		
Planform Area Ft^2	113.18	0.453
Leading Edge Intersects Fus M. L. @ Sta	500.00	2.000
Leading Edge Intersects Wing @ Sta	1024.00	4.096

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: SPOILER - Z_{14}

GENERAL DESCRIPTION: Elevon flipper door spoiler - Inboard (Midspan)

MODEL SCALE: 0.0040

DRAWING NO.: NONE

DIMENSIONS:	FULL SCALE	MODEL SCALE
Inboard Station:		
Leading edge @ X_0	1366.37	5.465
Trailing edge @ X_0	1401.57	5.606
Trailing edge @ Y_0	219.06	0.876
Span	186.44	0.746

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT_{16}

GENERAL DESCRIPTION: Forward orbiter/ET attach structure (2 member structure)

MODEL SCALE: 0.0040 MODEL DRAWING: SS-A00117

DRAWING NO.: VL78-000062B, SK-H-4011

DIMENSIONS:	MEMBER		FULL SCALE	MODEL SCALE
	#1	X_o	394.38	1.578
		Y_o	0.00	0.00
		Z_o	LWR ML	LWR ML
		X_T	1131.00	4.524
		Y_T	561.298	0.187
		Z_T	561.298	2.245
	#2	X_o	394.38	1.578
		Y_o	0	0
		Z_o	LWR ML	LWR ML
		X_T	1131.00	4.524
		Y_T	- 46.8	- 0.187
		Z_T	561.298	2.245
Diameter of members: (In.)			5.70	0.0228

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT_{17}

GENERAL DESCRIPTION: Left rear orbiter/ET attach structure (2 member structure)

MODEL SCALE: 0.004

DRAWING NO.: VL78-000062B, SK-H-4013. MODEL DRAWING: SS-A00117

DIMENSIONS: #	MEMBER		FULL SCALE	MODEL SCALE
	#1	X_o	1317	5.258
		Y_o	- 96.5	-0.386
		Z_o	267.5	1.070
		X_T	2058.0	8.232
		Y_T	- 125.827	-0.503
		Z_T	515.5	2.062
	#2	X_o	1317.0	5.258
		Y_o	- 96.5	-0.386
		Z_o	267.5	1.070
		X_T	2058.0	8.232
		Y_T	- 125.827	-0.503
		Z_T	515.5	2.062

Diameter of Members: #1 11.5 In. Dia. F.S.

#2 15.5 In. Dia. F.S.

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT_{18}

GENERAL DESCRIPTION: Right rear orbiter/ET attach structure (3 member structure)

MODEL SCALE: 0.004

DRAWING NO.: VL78-000062B, SK-H-4013 MODEL DRAWING: SS-A00117

DIMENSIONS:	MEMBER		FULL SCALE	MODEL SCALE
	#1	X_o	1317.00	5.258
		Y_o	+ 96.5	+ .386
		Z_o	267.5	1.070
		X_T	1872.0	7.488
		Y_T	+ 125.827	+0.503
		Z_T	515.5	2.062
	#2	X_o	1317.0	5.258
		Y_o	+ 96.5	+0.386
		Z_o	267.5	1.070
		X_T	2058.0	8.232
		Y_T	+ 125.827	0.503
		Z_T	515.5	2.062
	#3	X_o	1317.0	5.258
		Y_o	54.40	0.218
		Z_o	19.30	0.077
		X_T	2058.0	8.232
		Y_T	2.5	0.010
		Z_T	567.6	2.270
Diameter of Members: (In.)	#1		15.5	
	#2		11.5	
	#3		4.5	

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: FEEDLINE - FL_5

GENERAL DESCRIPTION: LOX feedline simulated between ET and Orbiter.

MODEL SCALE: 0.0040 MODEL DRAWING: SS-A00117

DRAWING NO.: VL78-000062B

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	1033.3	4.132
	Y_T	70.0	0.280
	X_T	1033.3	4.132
	Y_T	- 70.0	- 0.280
Trailing edge at:	X_T	2071.50	8.286
	Y_T	70.00	0.280
	X_T	2071.50	8.286
	Y_T	70.00	0.280
Diameter, In.		18.80	0.188

Centerline of LOX feedline located radially at $\phi = 23^{\circ}24'$

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: PRESSURE LINE - FL_6

GENERAL DESCRIPTION: Max. cross-sectional area simulating LH_2 pressure line and electrical conduit box between ET and Orbiter.

MODEL SCALE: 0.0040

DRAWING NO.: VL78-000062B MODEL DRAWING: SS-A00117

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	1127.1	4.508
	Y_T	110.3	0.441
Trailing edge at:	X_T	2062.1	8.248
	Y_T	110.3	0.441

Centerline of LH pressure line located radially at $\phi = 33^{\circ}45'$.

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT_{68}

GENERAL DESCRIPTION: Forward ET/orbiter attach, 74-0 model, vertical single post attach member.

MODEL SCALE: 0.0040

DRAWING NO.: VL78-000062B

DIMENSIONS:	FULL SCALE	MODEL SCALE
X_O	388.15	1.553
Y_O	0.0	0.0
Z_O	LML	LML
X_T	1129.9	4.520
Y_T	0.0	0.0
Z_T (Attach Point on Tank)	565.1	2.2604
Diameter, Inches	15.75	0.063
Height of Member (distance between top centerline of tank and bottom centerline of orbiter), In.	48.9	0.196

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT_{69}

GENERAL DESCRIPTION: Forward ET/orbiter attach, model 74-0, vertical single post attach member.

MODEL SCALE: 0.0040

DRAWING NO.: VL78-000062B

DIMENSIONS:	FULL SCALE	MODEL SCALE
X_0	388.15	1.553
Y_0	0.0	0.0
Z_0	LML	LML
X_T	1129.9	4.520
Y_T	0.0	0.0
Z_T (Attach Point on Tank)	565.1	2.2604
Diameter, Inches	15.75	0.063
Height of Member (distance between top centerline of tank and bottom centerline of orbiter), In.	24.45	0.098

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: REAR ATTACH STRUCTURE FAIRING - FR_6

GENERAL DESCRIPTION: Rear ET/Orbiter attach structure cross-member or beam fairing used in conjunction with AT_{12}, AT_{13}, FL_1 and FL_2.

MODEL SCALE: 0.0040

DRAWING NO.: VL78-000062B MODEL DRAWING: SS-A01256

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge centerline at	X_T	2036.67	8.147
	Y_T	0.00	0.00
	Z_T	183.00	0.732
Maximum length, In.		64.00	0.256
Maximum width, In.		190.00	0.760

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : LH_2 UMBILICAL FEEDLINE - FL_9

GENERAL DESCRIPTION : LH_2 Umbilical Feedline with an electrical quick-disconnect box between the Orbiter and ET.

MODEL SCALE: 0.0040

DRAWING NUMBER : VL78-000062B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Centerline at X	2071.5	8.286
Max Width	31.2	0.125
Max Depth	37.5	0.150
Diameter	17.0	0.068
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: ET PROTUBERANCE - PT_{12}

GENERAL DESCRIPTION: Lightning rod attached to ET nose.

MODEL SCALE: 0.004

DRAWING NO.: VL78-000068A

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length	30.90	0.124
Diameter, In.	3.20	0.013

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: ET PROTUBERANCE - PT_{13}

GENERAL DESCRIPTION: Maximum cross-sectional area simulating LOX recirculation line and electrical conduit box on planform view of External Tank, T_{20}.

MODEL SCALE: 0.0040 MODEL DRAWING: SS-A00117

DRAWING NO.: VL78-000062B

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	1208.3	4.833
	Y_T	+ 95.0	+ 0.380
	X_T	1208.3	4.833
	Y_T	- 95.0	- 0.380
Trailing edge at:	X_T	2060.5	8.242
	Y_T	95.0	0.380
	X_T	2060.5	8.242
	Y_T	- 95.0	- 0.380

Centerline of LOX recirculation line located radially at $\phi = 33^{\circ}45'$.

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: ET PROTUBERANCE - PT_{14}

GENERAL DESCRIPTION: LOX pressure line on Tank T_{20}.

MODEL SCALE: 0.0040

DRAWING NO.: VL78-000062B

DIMENSIONS:

		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	355.90	1.424
	Y_T	6.0	0.024
Trailing edge at:	X_T	2060.5	8.242
	Y_T	87.0	0.348

Centerline of LOX pressure line located radially at $\phi = 23^{\circ}24'$.

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: NOSE CONE LINES - PT_{20}

GENERAL DESCRIPTION: Maximum cross-sectional area simulating the LOX pressure line and electrical conduit on top of external tank (T_{20}) nose cone area.

MODEL SCALE: 0.0040

DRAWING NO.:

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	360.92	1.444
	Y_T	34.0	0.136
Trailing edge at:	X_T	955.1	3.820
	Y_T	336.5	1.346

Centerline of lines located radially at $\phi = 33^{\circ}45'$.

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : EXTERNAL TANK - T_{20}

GENERAL DESCRIPTION : External Oxygen-Hydrogen tank

MODEL SCALE: 0.0040

DRAWING NUMBER : VL72-000131, VL78-000062

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length, In. (Nose @ X_o=328.92)	1846.905	7.388
Max Width Dia, In. @ X_o=975.675	333.2	1.333
Max Depth , In.	330.2	1.333
Fineness Ratio	5.65713	5.65713
Area - Ft^2		
Max. Cross-Sectional	605.534	0.0096
Major Cross section	594.679	0.0095
WP of tank centerline (Z), In.	400.000	0.0064
Base (on 330.2 dia.)	594.679	0.0095

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: SRB PROTUBERANCE - PS_7

GENERAL DESCRIPTION: SRB/ET attach ring: two attach rings and one structural ring.

MODEL SCALE: 0.0040

DRAWING NO.: VL77-000066

DIMENSIONS (DATA FOR 1 OF 2):	FULL SCALE	MODEL SCALE
Centerline at X_B	1505	6.020
	1517	6.068
	1852	7.408
Width	10	0.040
Heigth	10	0.040

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : SRB PROTUBERANCE - PS20

GENERAL DESCRIPTION : Electrical tunnel on SRB side, 30 deg. taper leading edge, circular cross section with mounting flange. Tunnel discontinued from X_B = 1504.25 to 1517.75

MODEL SCALE: 0.0040 MODEL DRAWING: SS-A01281

DRAWING NUMBER : VC77-000002A

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length , In.	1384.57	5.538
Max Width	13.00	0.052
Max Depth	3.72	0.015
Radius	0.619	0.619
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		
Taper at leading edge, deg.	30	30

TABLE III (Continued)

MODEL DIMENSIONAL DATA

MODEL COMPONENT: Tie-DOWN STRUCTURE - PS-9

GENERAL DESCRIPTION: Tie-down lugs on shroud of solid rocket motor booster.

MODEL SCALE: 0.004

DRAWING NO.: VL77-000066

DIMENSIONS:	FULL SCALE	MODEL SCALE
Number of tie-down lugs	4	4
Length, In.	64.00	0.256
Width, In.	13.00	0.052
Max. Height (at T. E.)	8.334	0.033
Angular position (from vertical), Deg.	60	60

TABLE III (Concluded)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : BOOSTER SOLID ROCKET MOTOR - S_{22}

GENERAL DESCRIPTION : The BSRM is an external propulsion system which is jettisoned and recoverable after burnout. The BSRM's can be refurbished and reused after recovery.

MODEL SCALE: 0.0040

DRAWING NUMBER : VC77-000002C, VC70-000002A, VC72-000002C

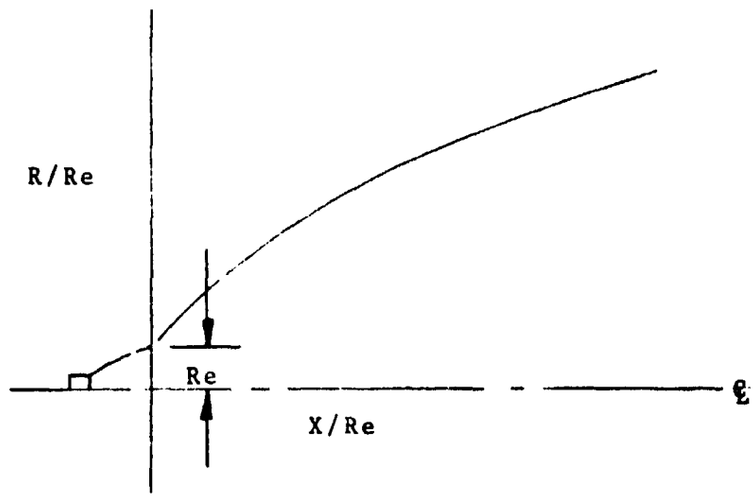
DIMENSIONS	FULL SCALE	MODEL SCALE
Length, In.,	1789.60	7.158
Max Width, Tank Dia., In.	146.00	0.584
Max Depth, Aft shroud dia., In.	208.20	0.833
Fineness Ratio	8.596	8.596
Area - Ft^2		
Max. Cross-Sectional	236.423	0.0038
Planform		
Wetted		
Base		
WP of BSRM centerline (Z_T)	400.00	1.600
FS of BSRM nose (X_T)	743.0	2.972
BP of BSRM centerline (Y_T)	250.5	1.002

TABLE IV - SOLID PLUME COORDINATES

M = 4.4

Re = 45.36 in.

R/Re	X/Re
1.000	.0000
1.222	.2398
1.428	.4709
1.618	.6936
1.859	.9871
2.202	1.4240
2.503	1.8250
2.915	2.4020
3.319	3.0010
3.723	3.6320
4.127	4.2980
4.883	5.6380
5.670	7.1800
6.381	8.7160
7.128	10.5100
7.784	12.2600
8.386	14.0400
9.002	16.0500
9.552	18.1000
10.010	20.0400
10.410	21.9000
10.790	23.8700



Notes:

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows.
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity.

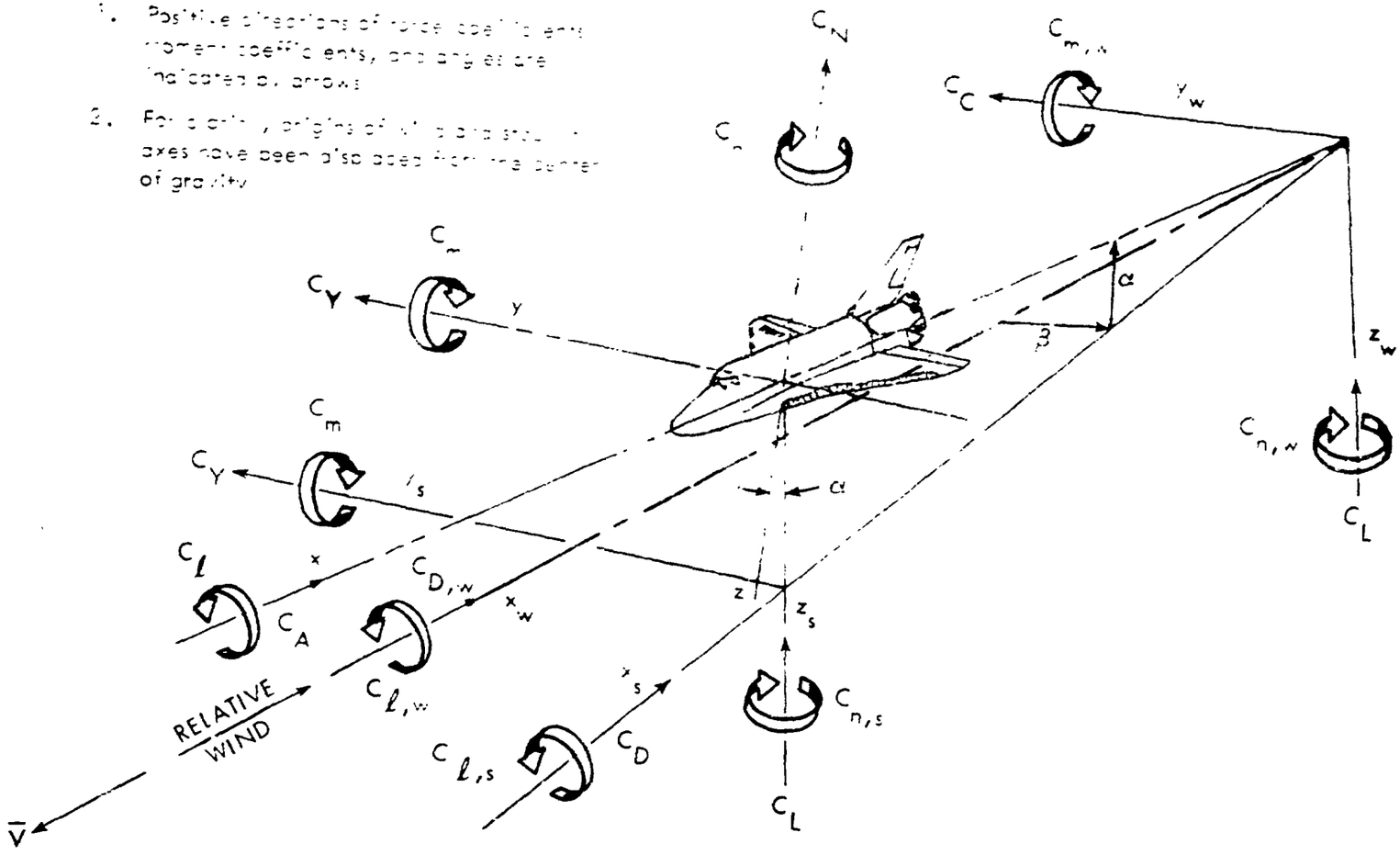


Figure 1. Axis System

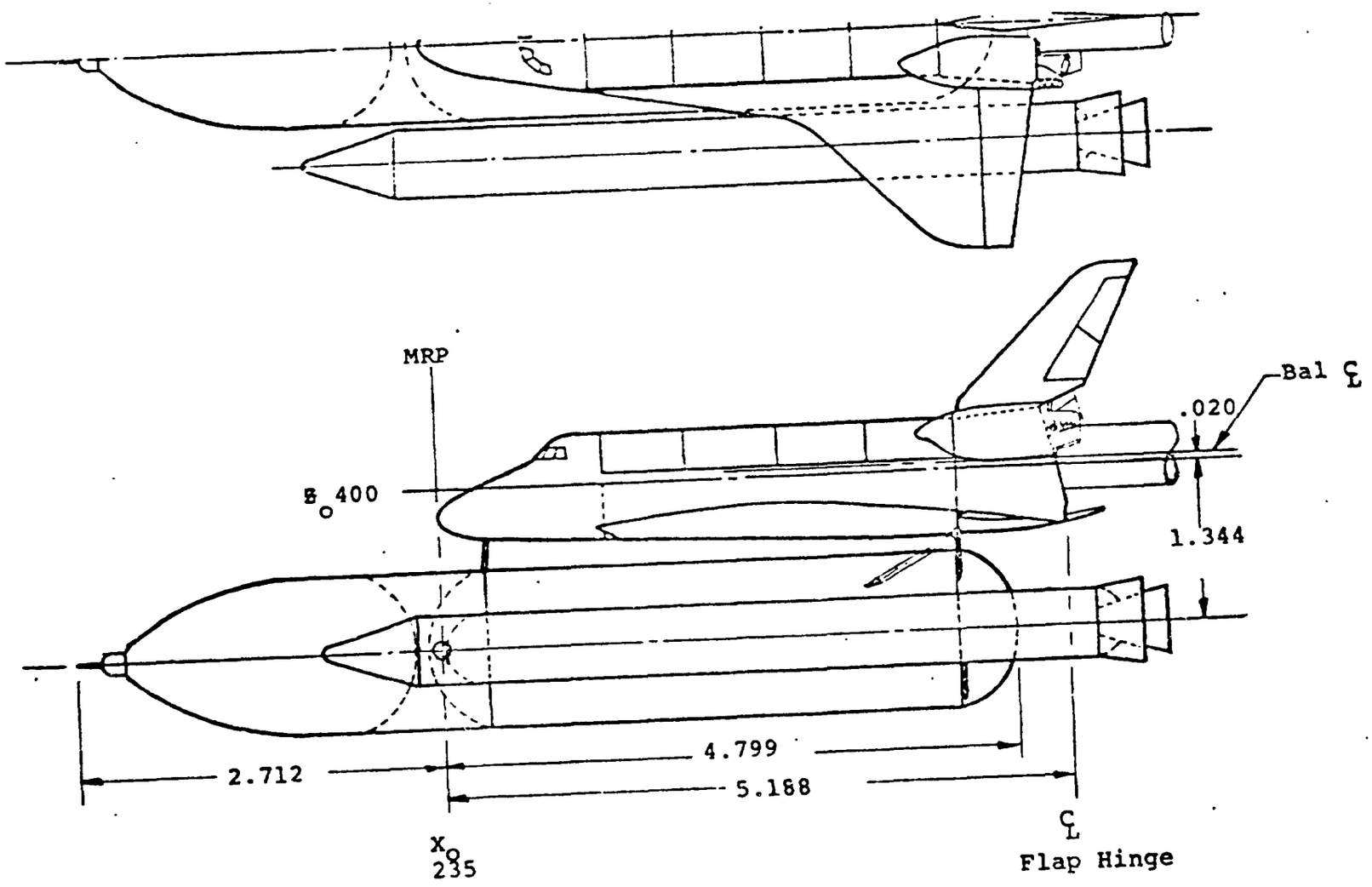


Figure 2.a. General Arrangement of Launch Vehicle Model (Balance in Orbiter).

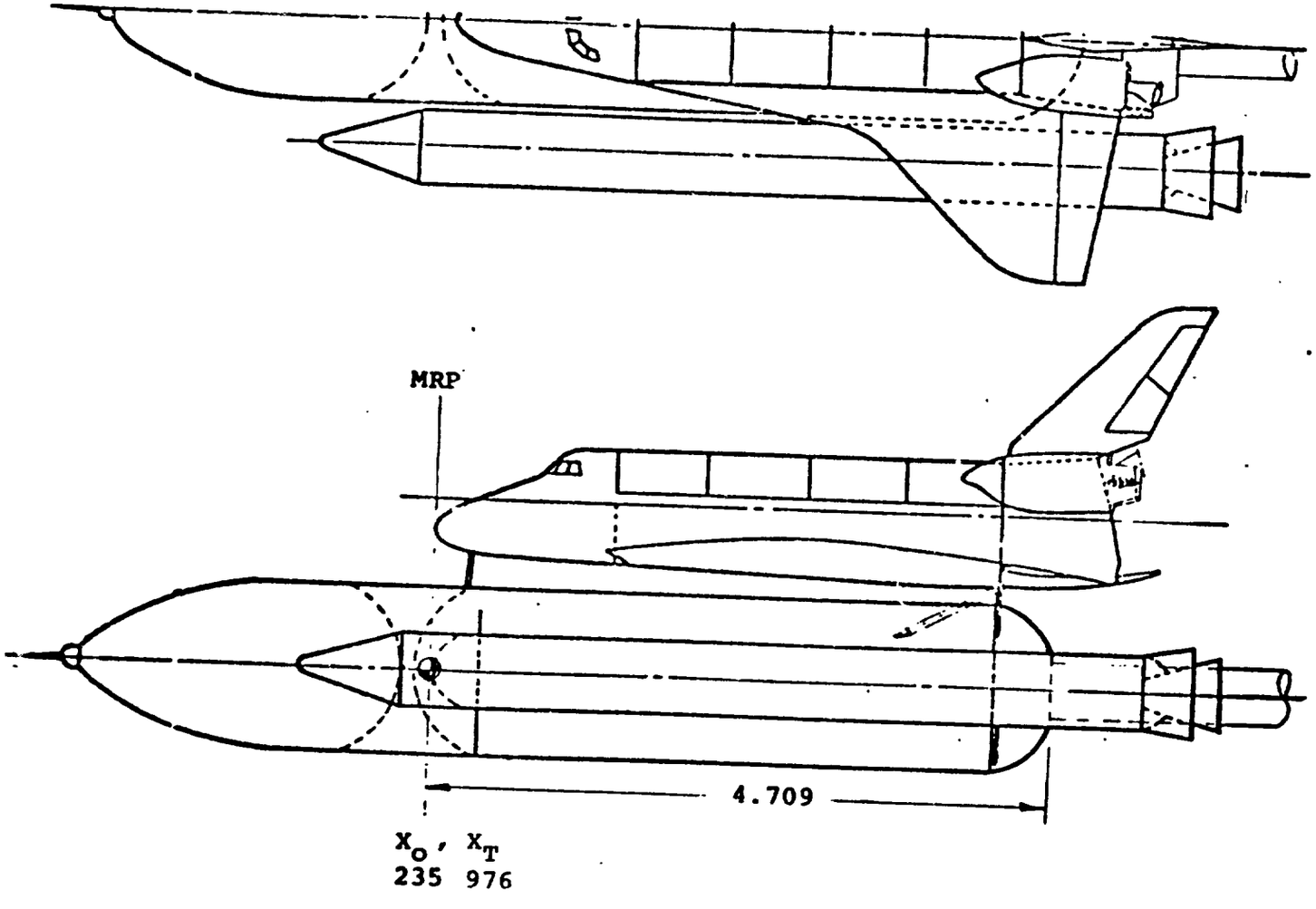


Figure 2.b General Arrangement of Launch Vehicle Model (Balance in the External Tank).

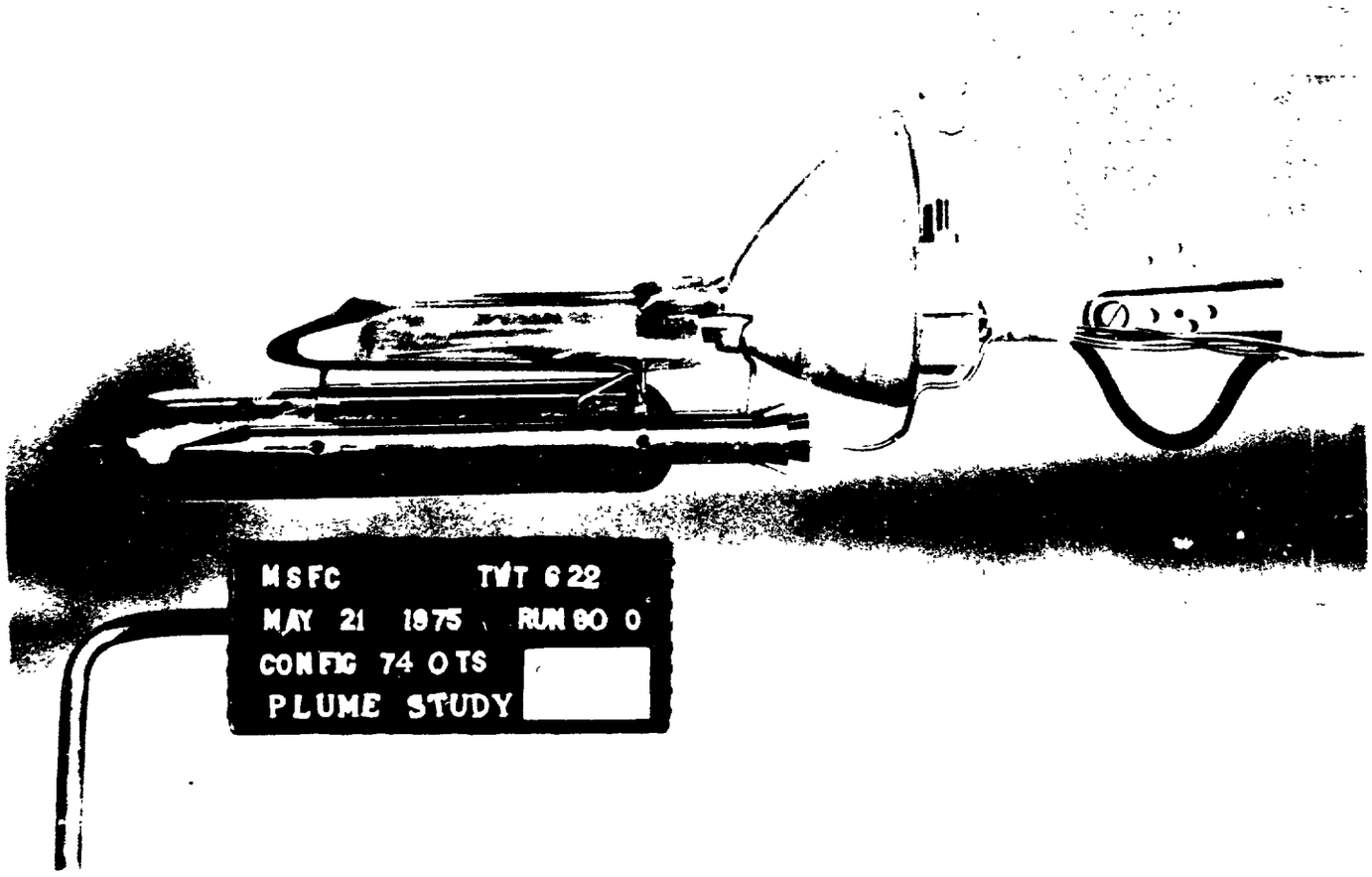


Figure 3. Model with SSME Solid Plumes Installed .

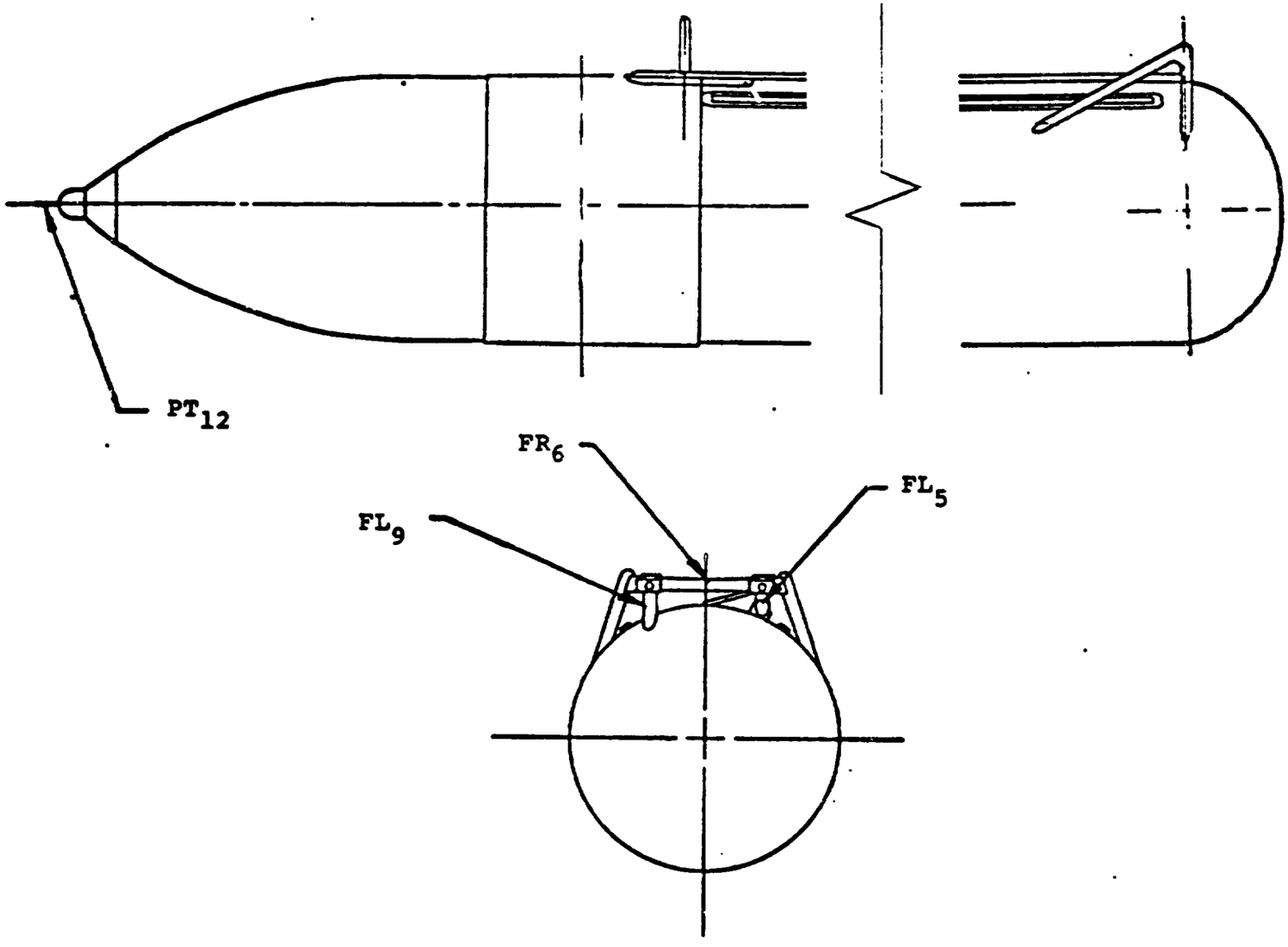


Figure 4. Tank (T_{20}) Protuberances

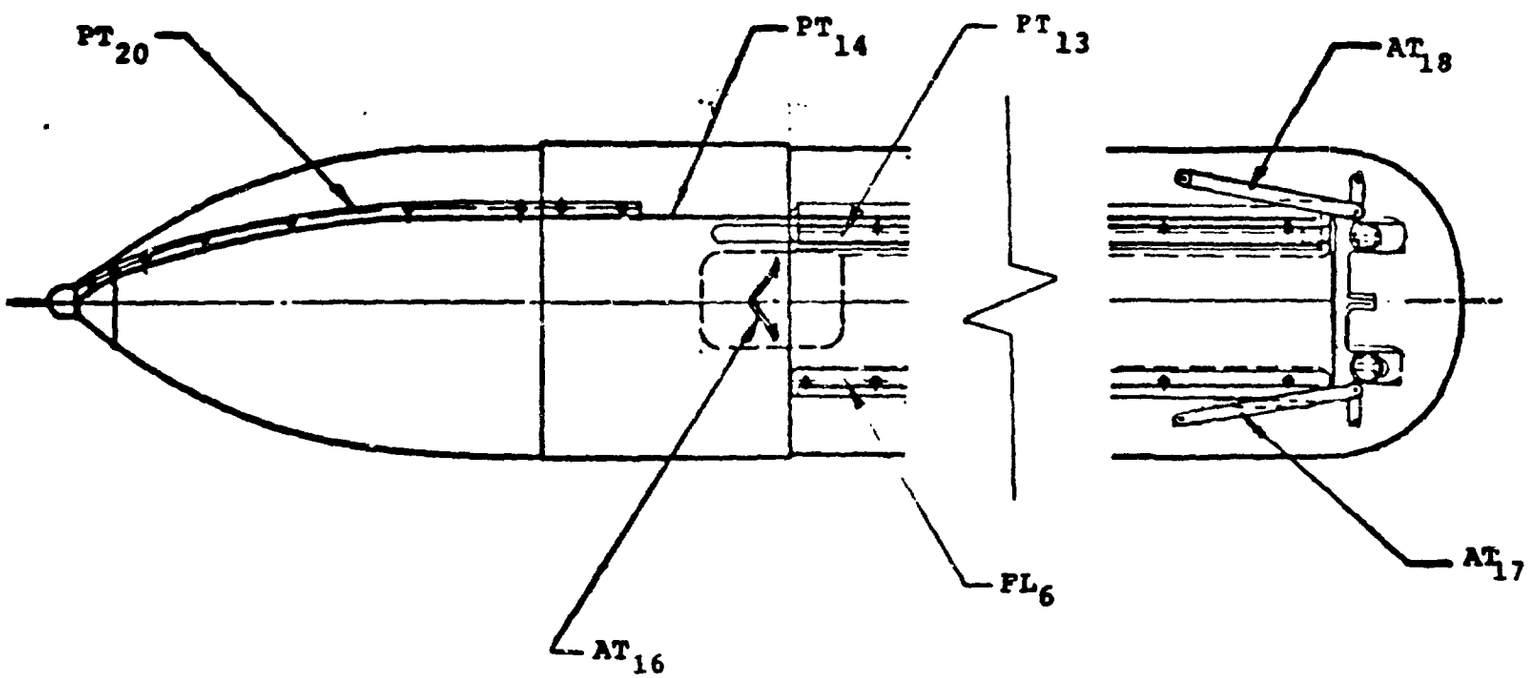


Figure 4. Tank (T_{20}) Protuberances (Concluded).

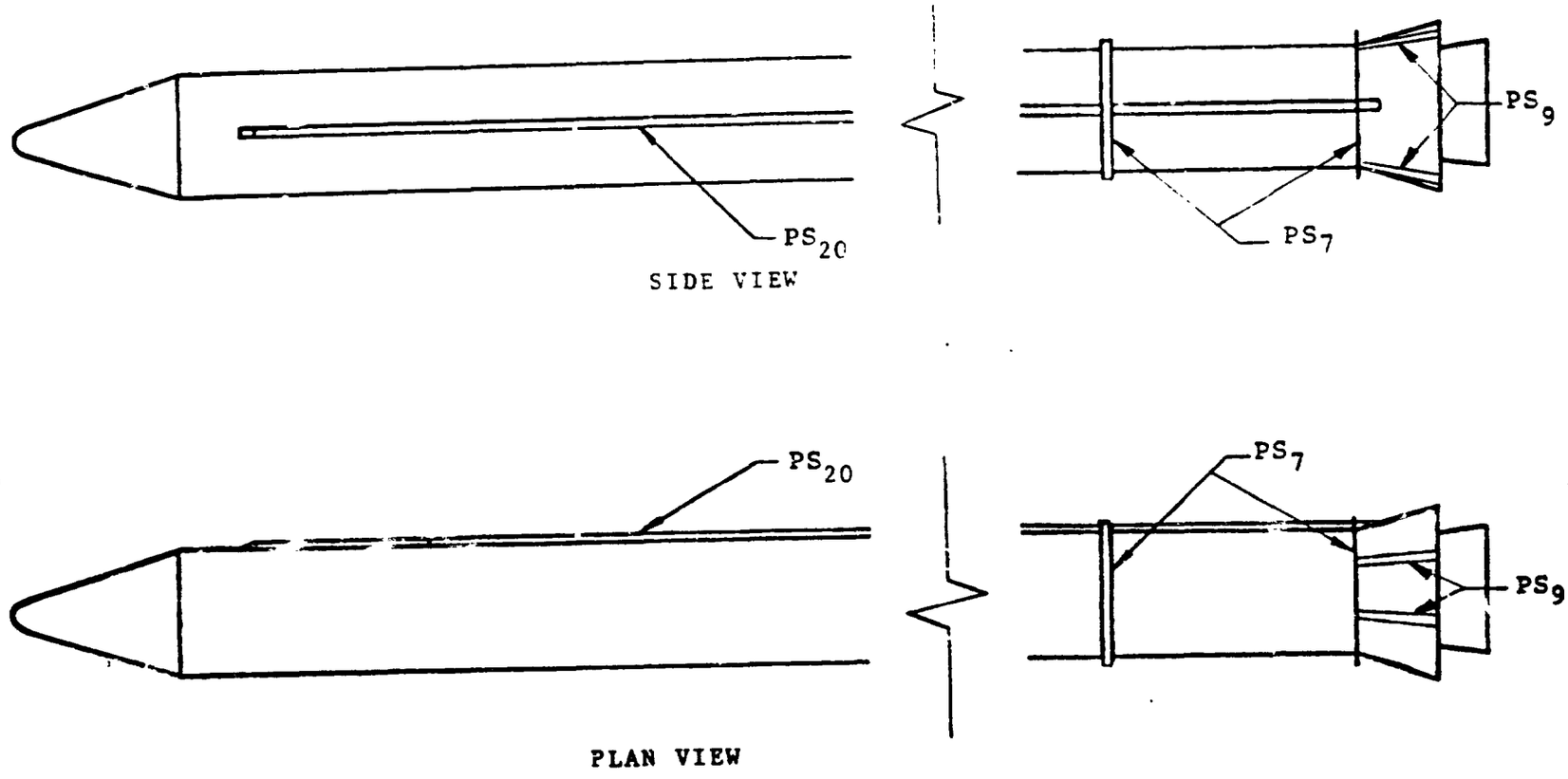


Figure 5. **SRB (S_{22}) Protuberances**

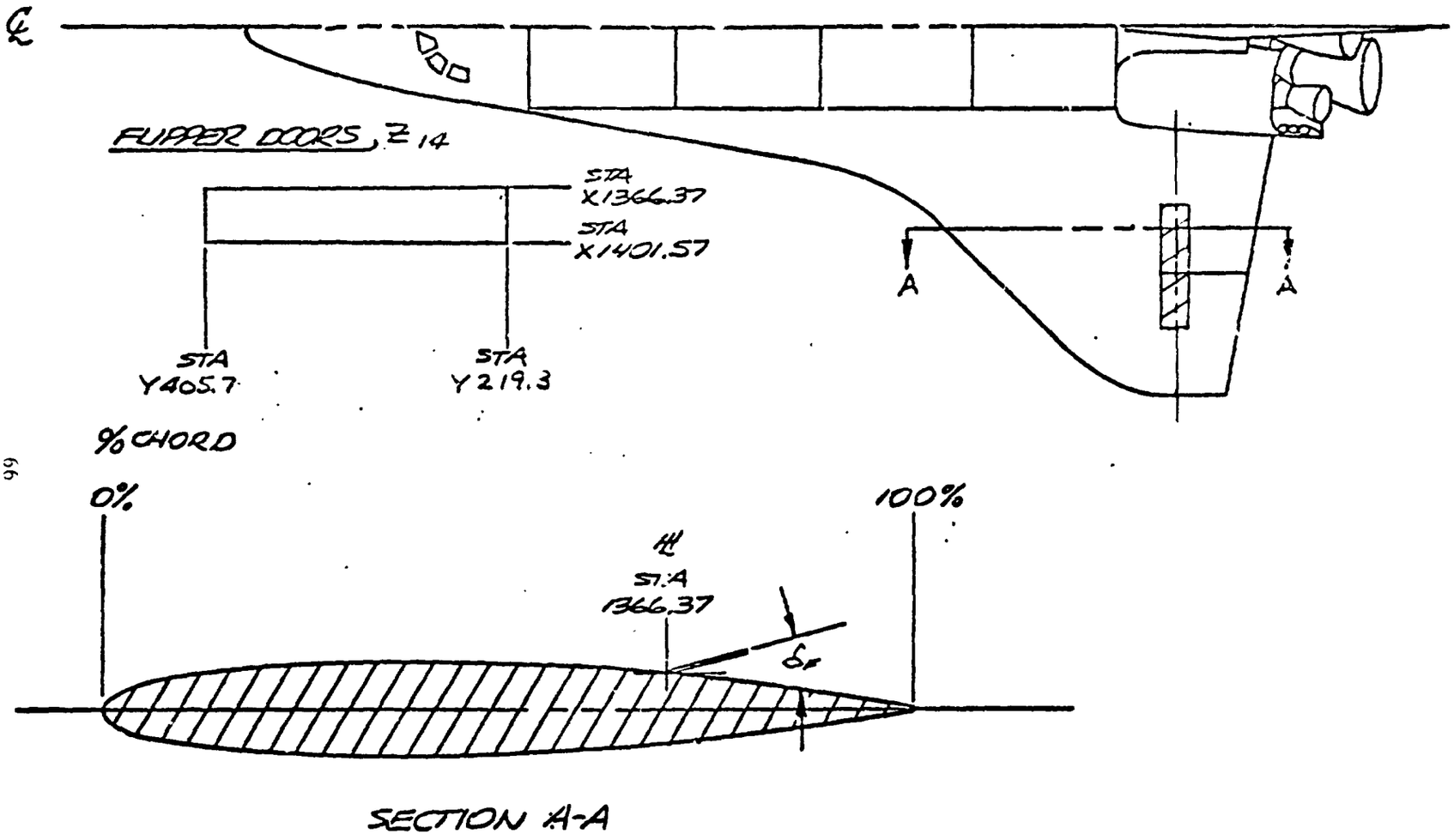


Figure 6. Elevon Flipper Doors, Z_{14}.

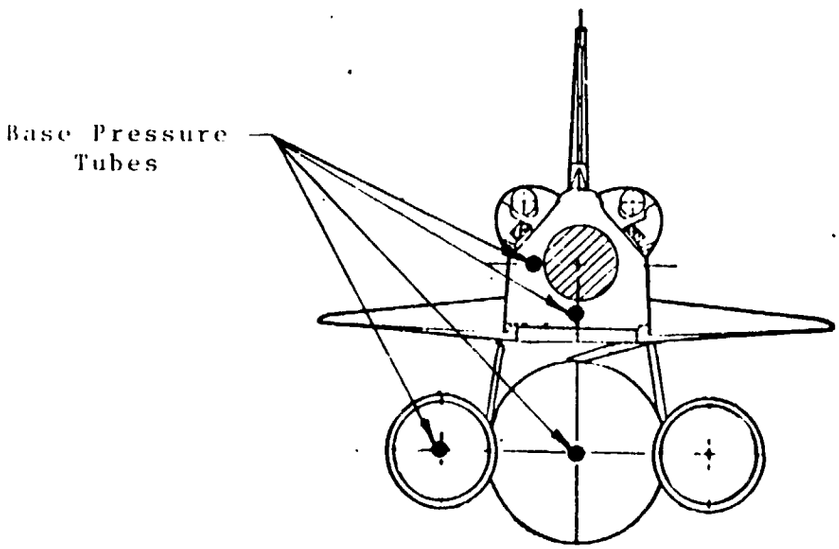


Figure 7.a. Location of Base Pressure Tubes (Balance in Orbiter).

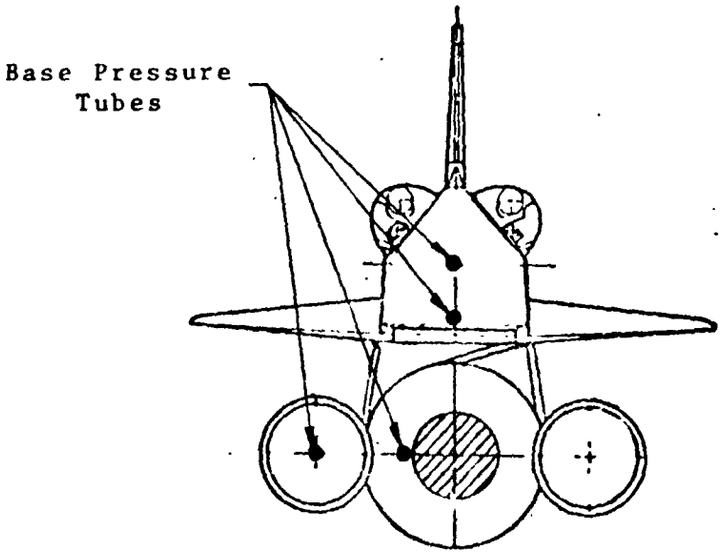


Figure 7.b. Location of Base Pressure Tubes
(Balance in External Tank).

DATA FIGURES

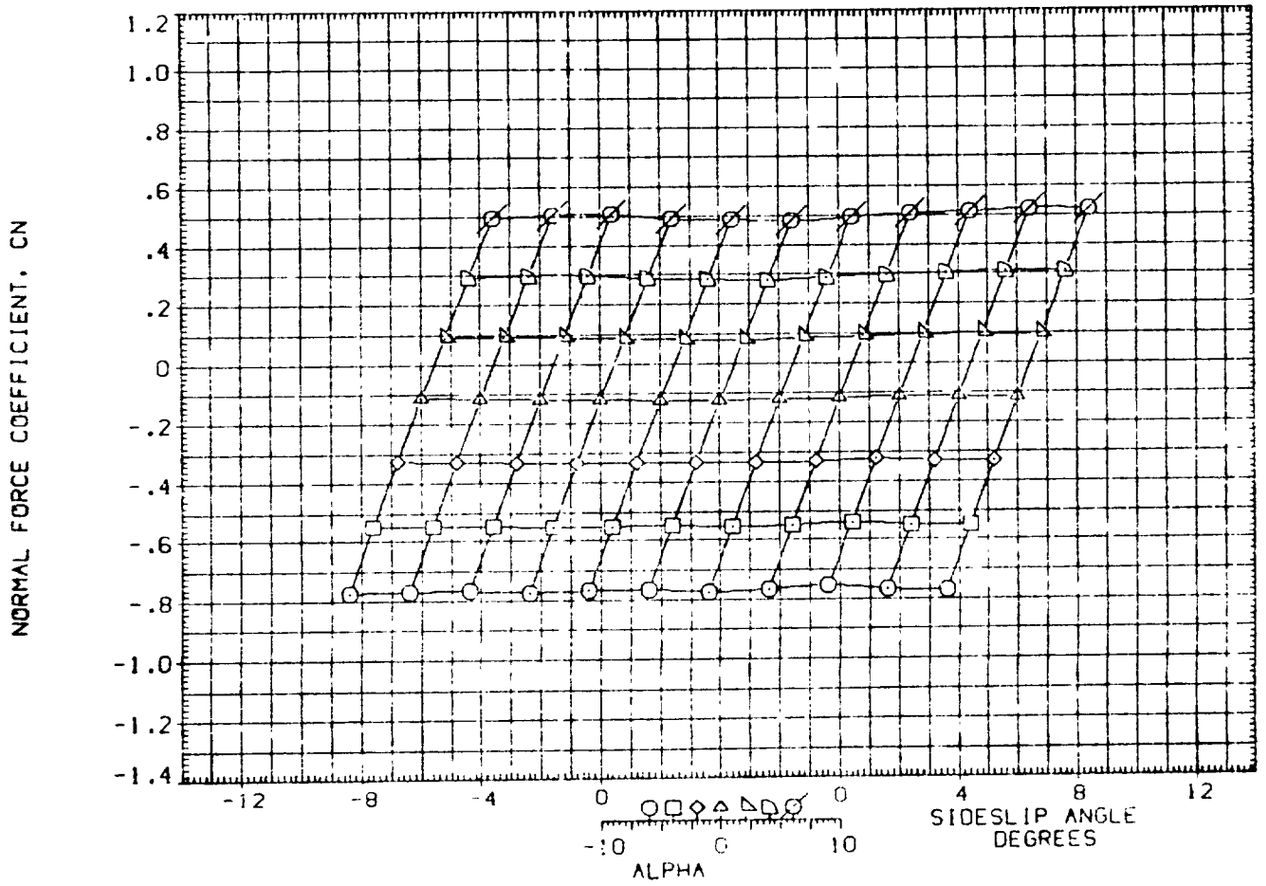
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 0.60 (S1N060)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

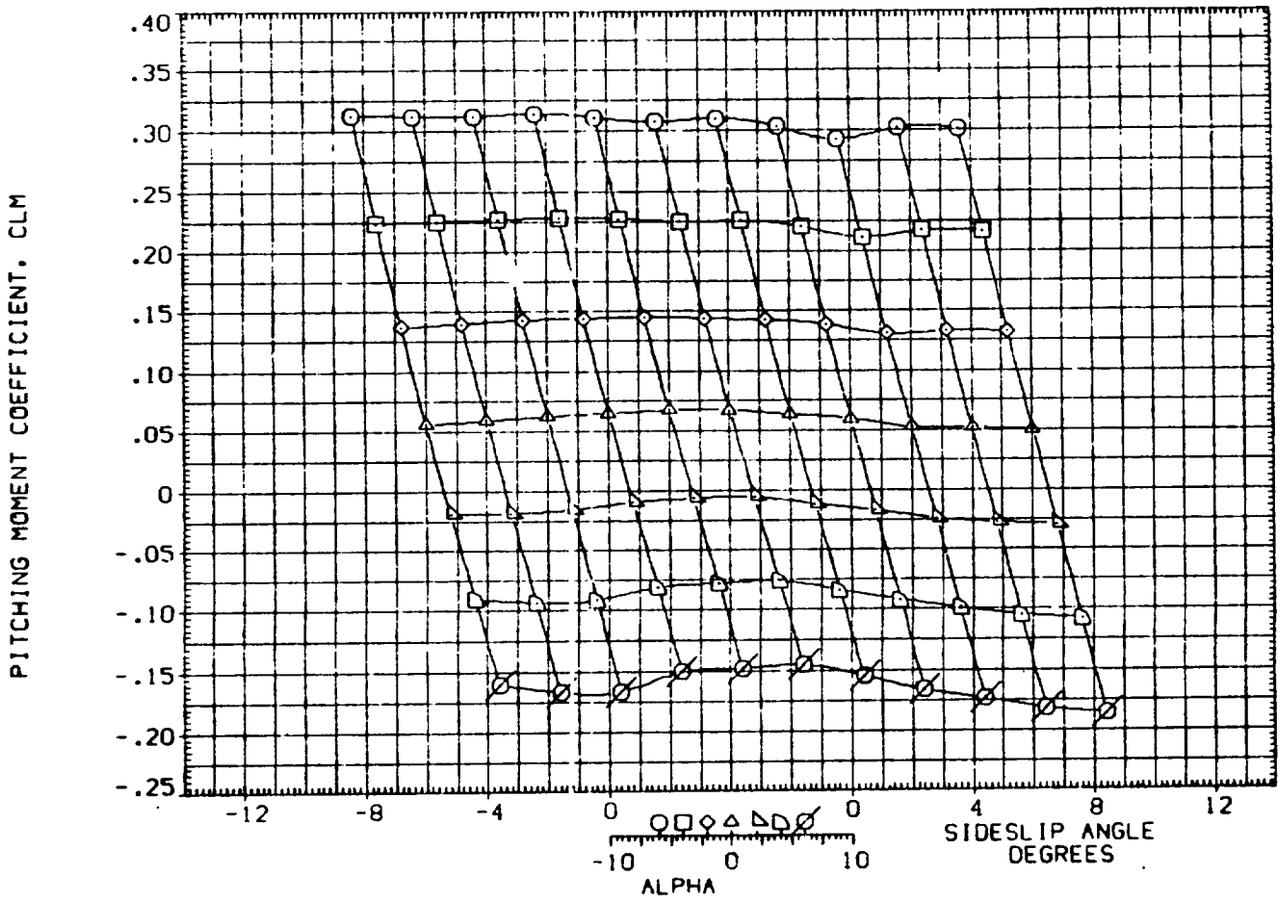
MSFC TWT 622 (IA125) 74 OTS, MACH NUMBER = 0.60 (S1N060)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

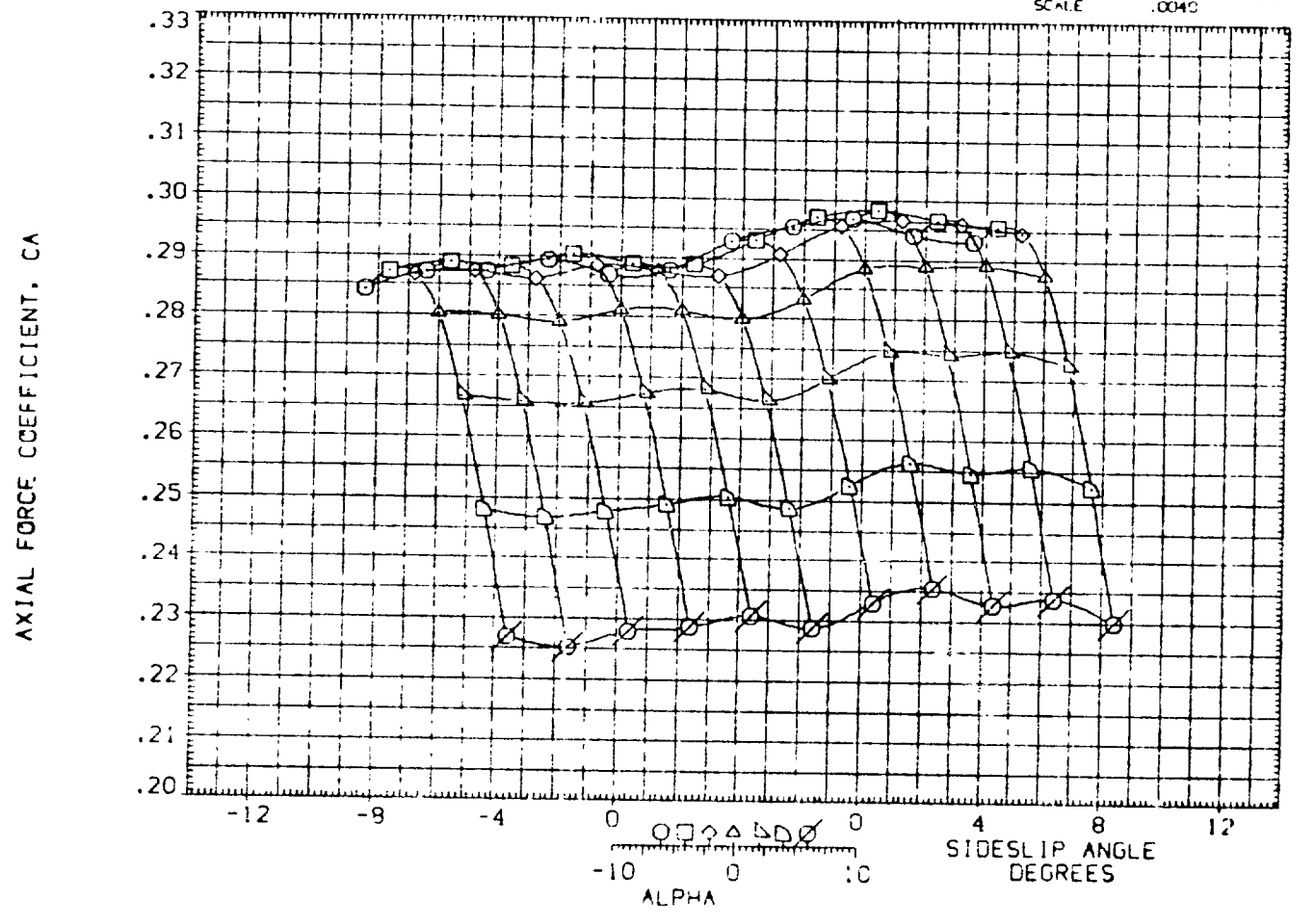
MSFC TWT 622 (IA:25) 74 OTS, MACH NUMBER = 0.60 (SIN060)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

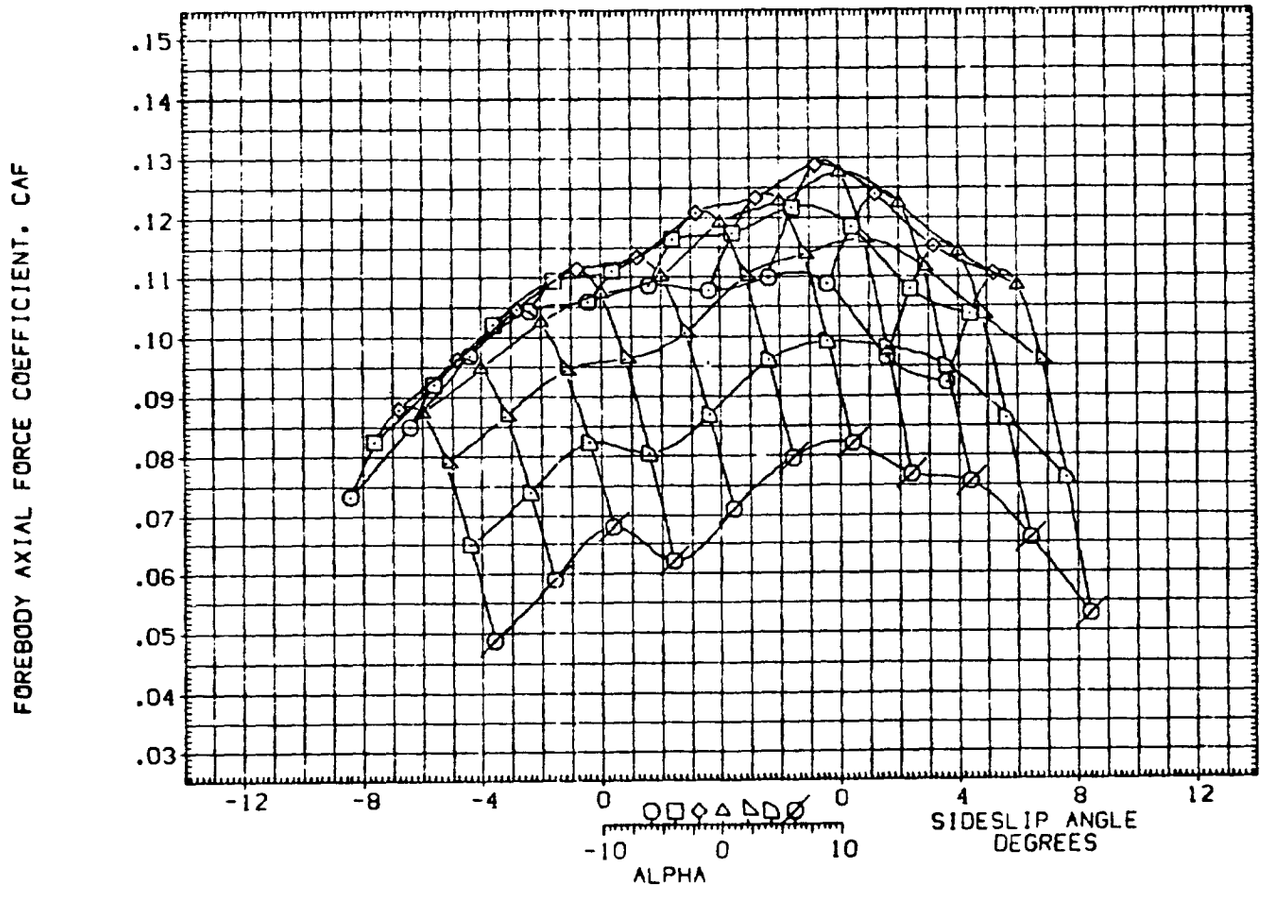
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 0.60 (S1N060)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

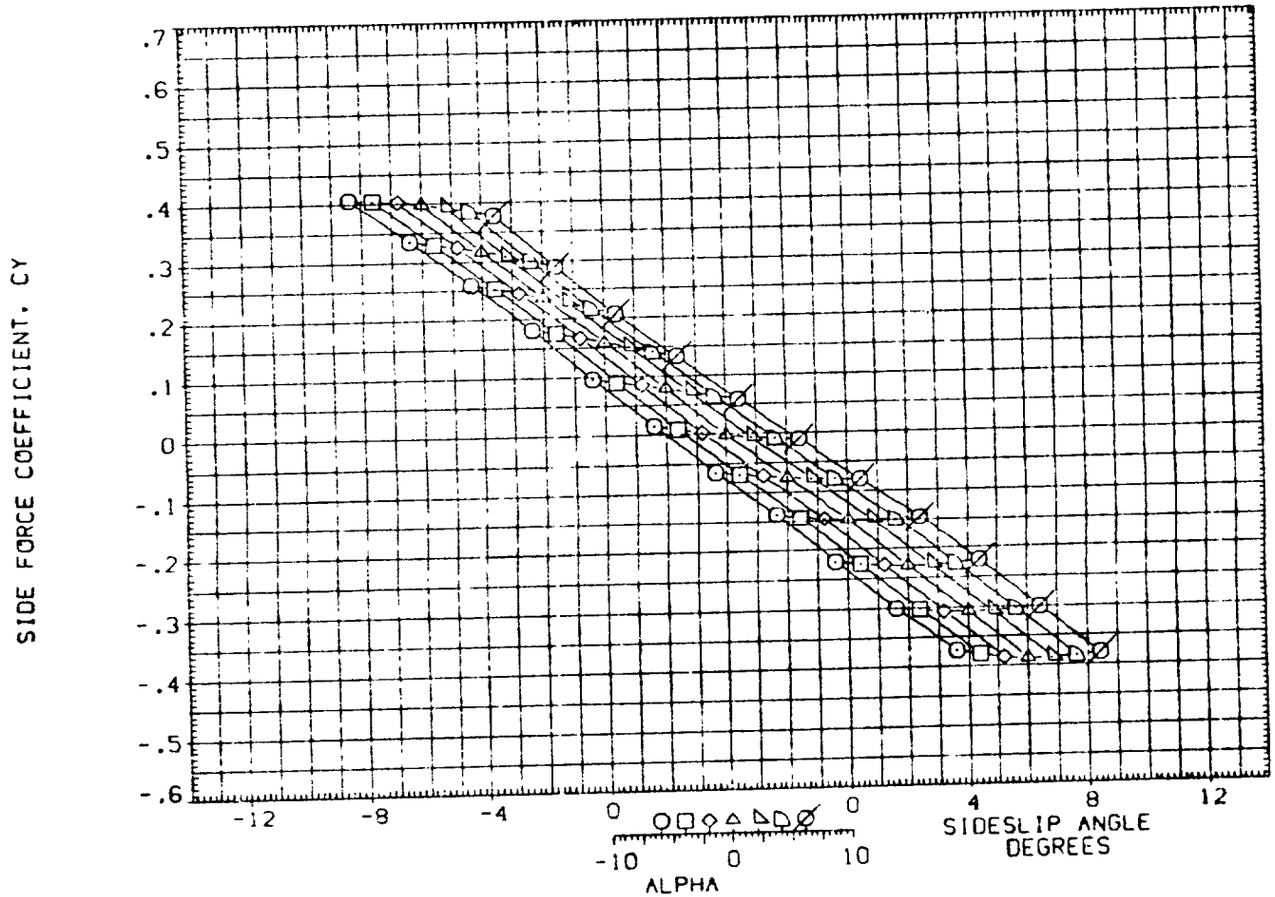
MSFC TWT 622 (IA125) 74 01S, MACH NUMBER = 0.60 (S1N060)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

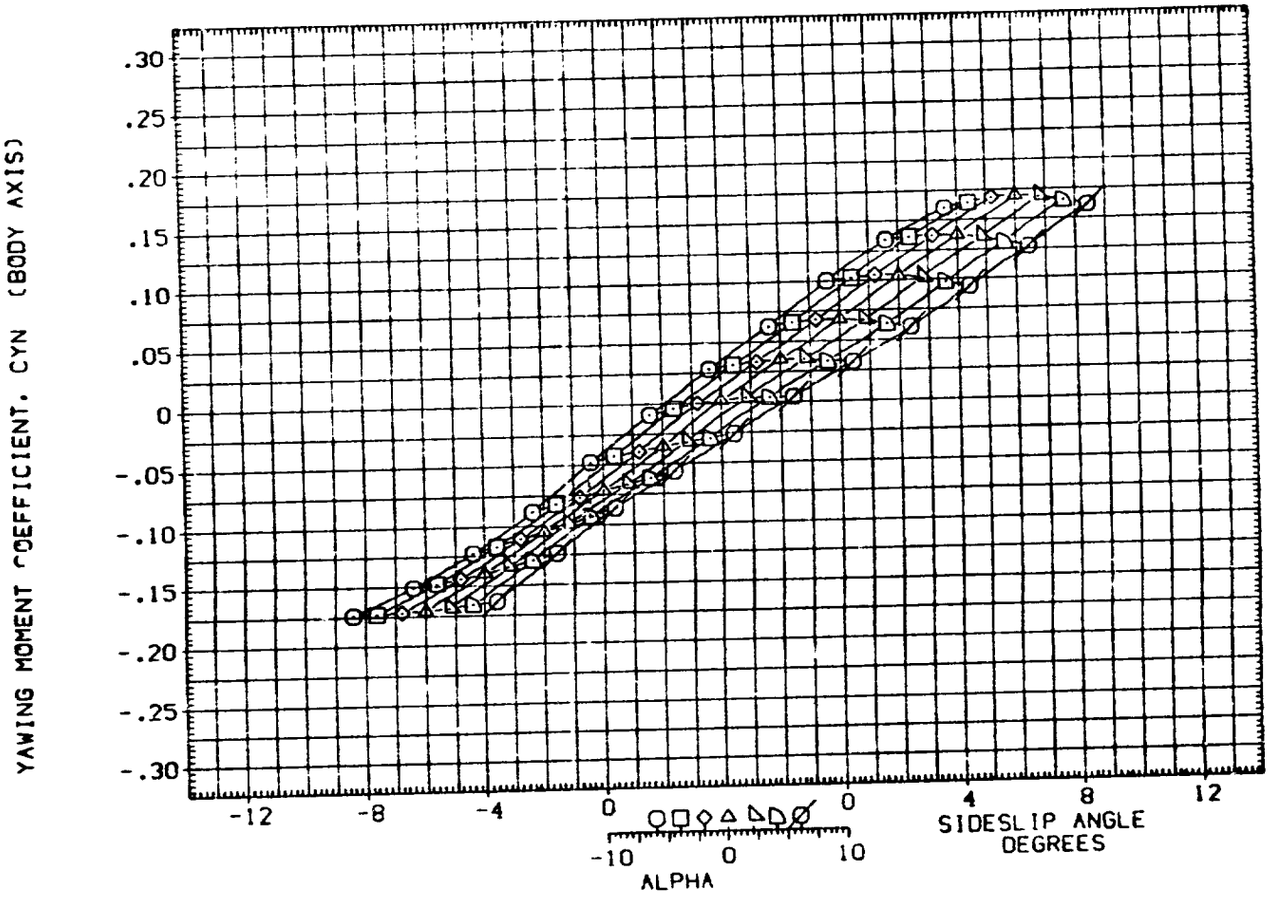
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 0.60 (S1N060)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN YT
ZMRP	400.0000	IN ZT
SCALE	.0010	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

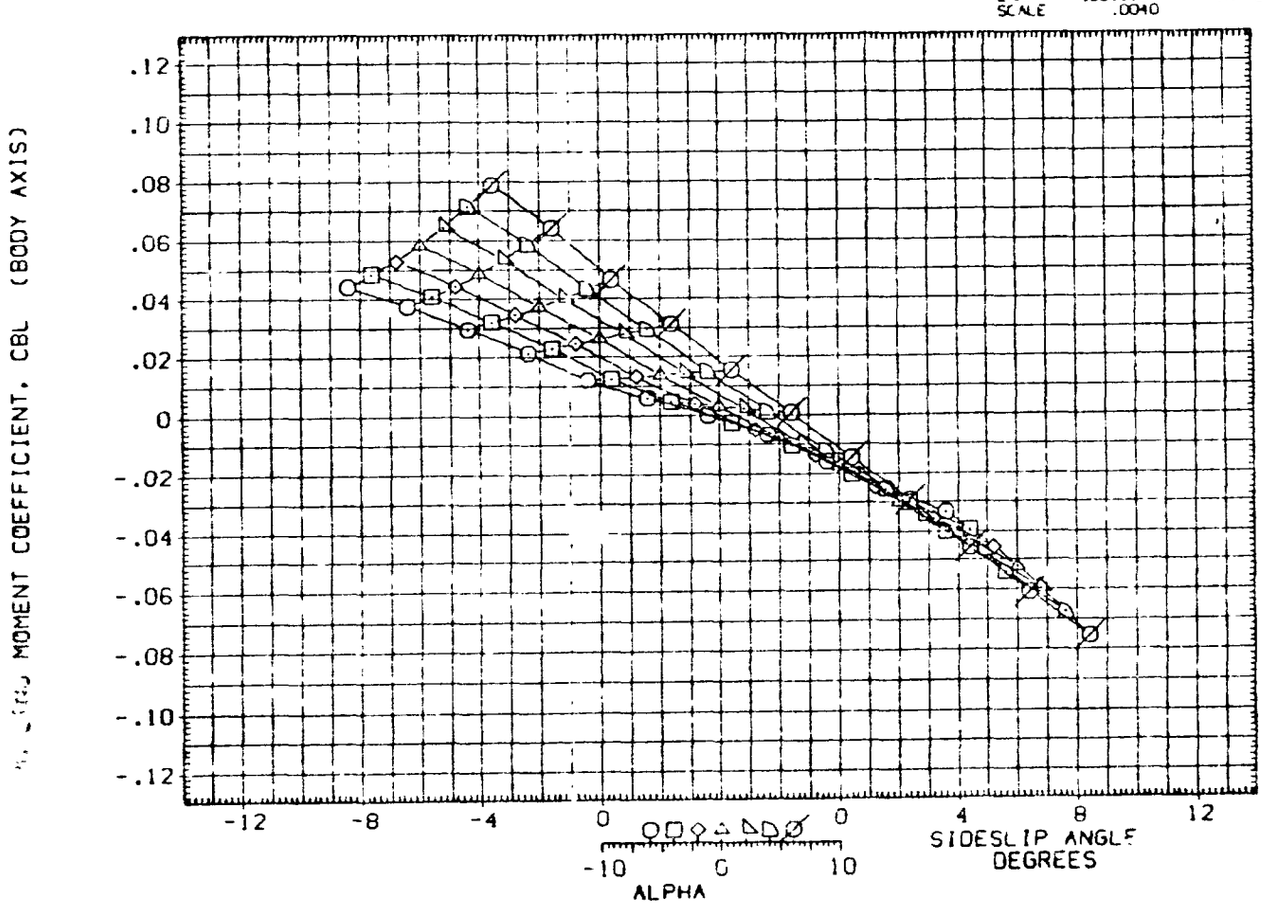
MSFC TWT 622 (IA125) 74 OTS, MACH NUMBER = 0.60 (S1N060)

PARAMETRIC VALUES

ELV-1L	-.917	ELV-0L	-.917
ELV-1R	.000	ELV-0R	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

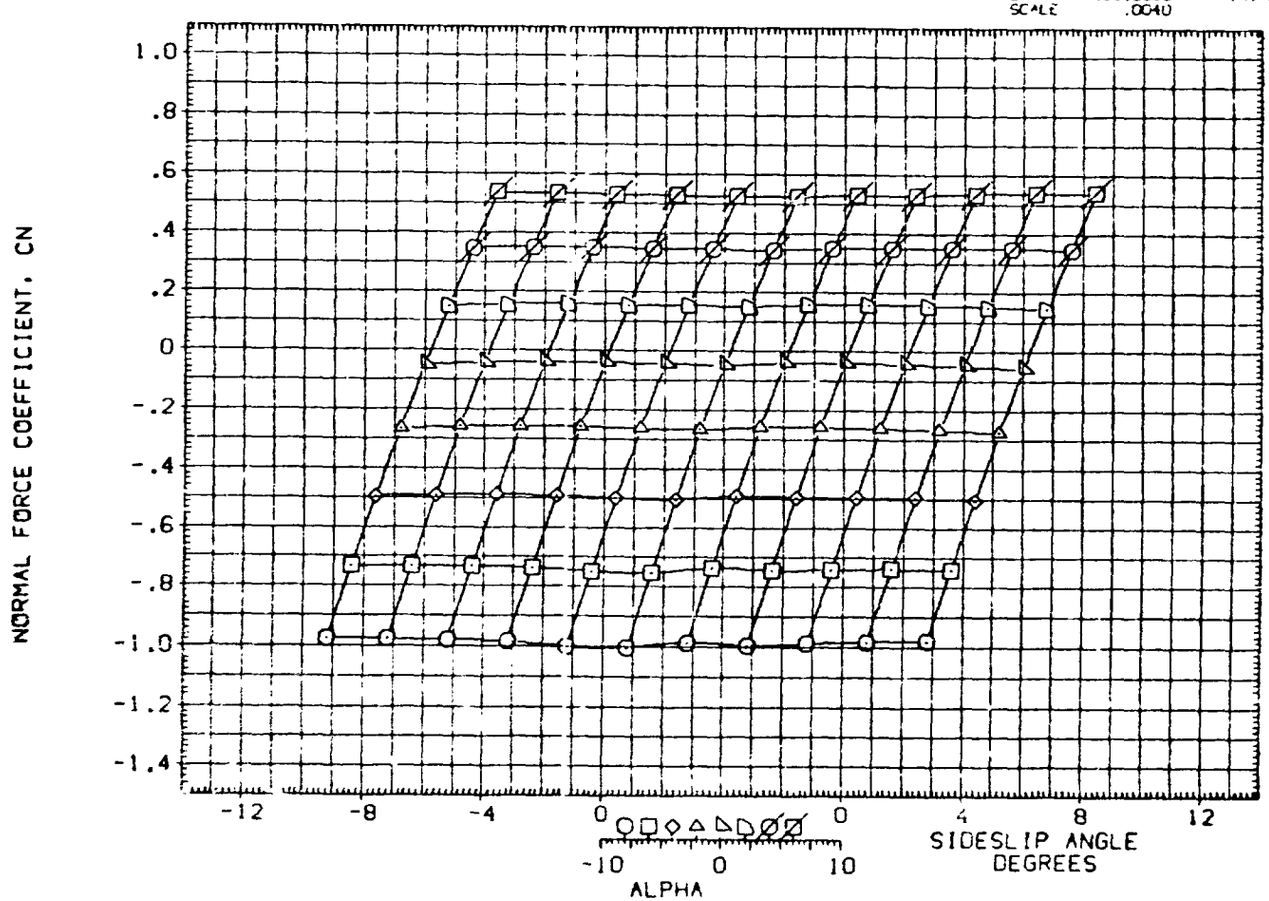
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 0.90 (S1N090)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

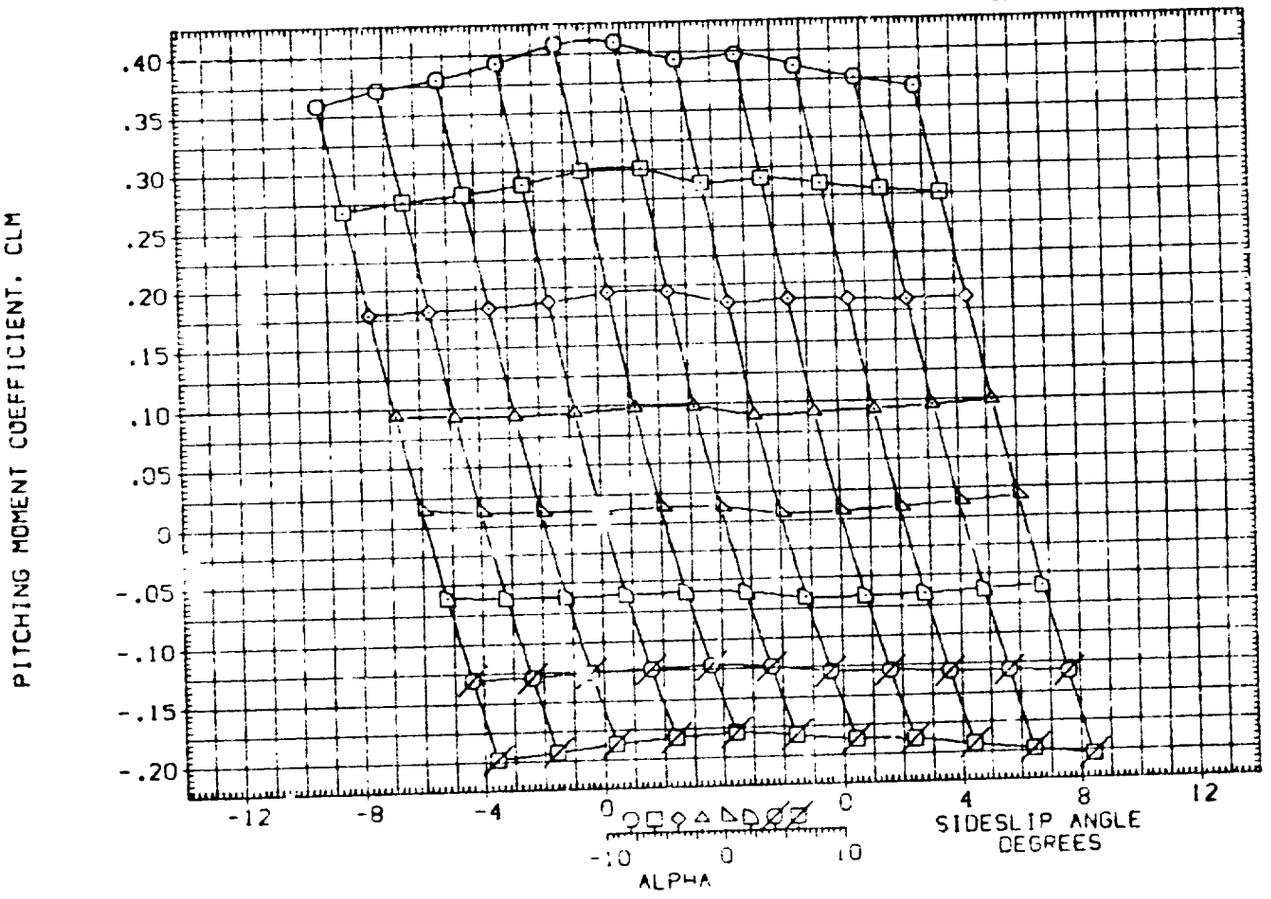
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 0.90 (SIN090)

PARAMETRIC VALUES

ELV-1L	-.917	ELV-0L	-.917
ELV-1R	.000	ELV-0R	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

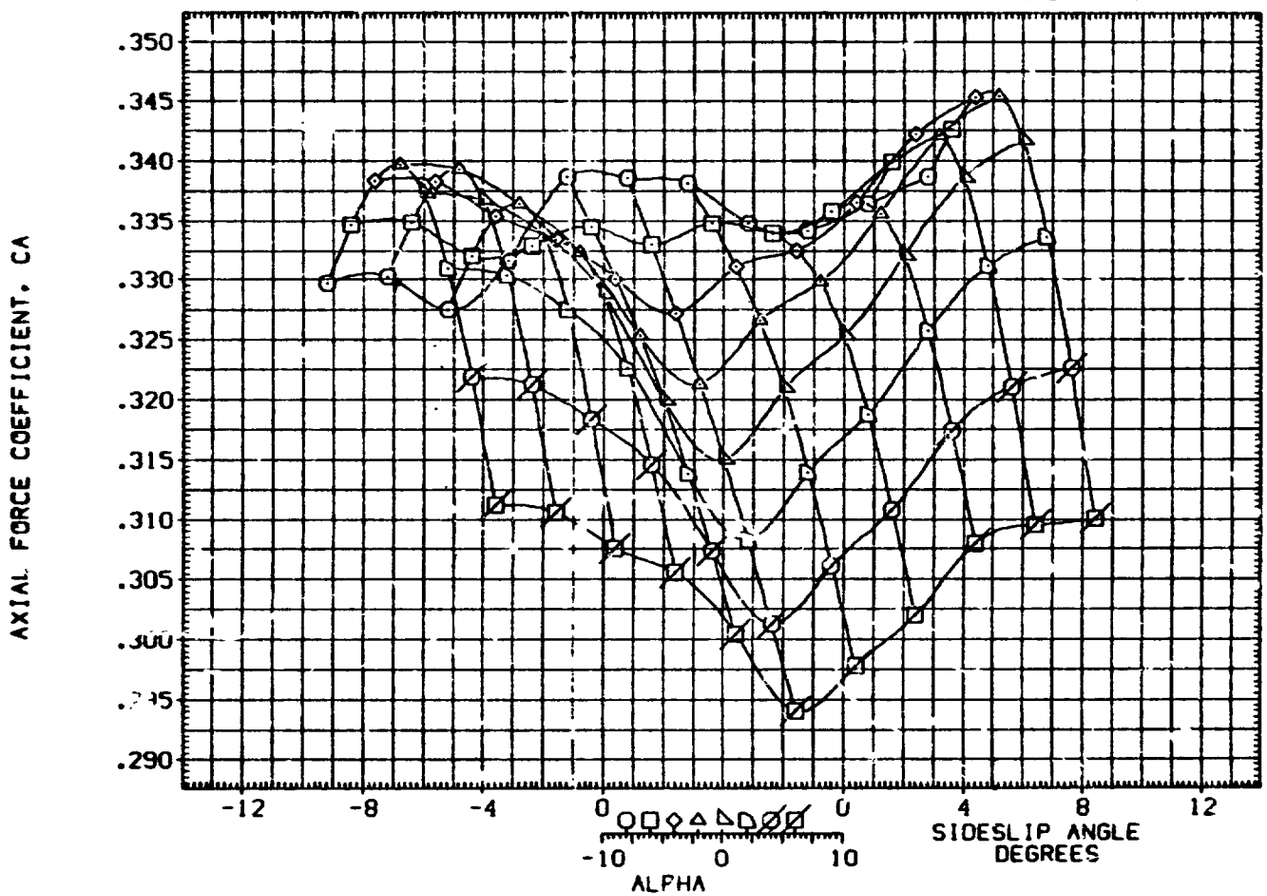
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 0.90 (SIN090)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.317
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

MSFC TWT 622 (IA125) 7A OIS, MACH NUMBER = 0.30 (SIN090)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2670.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
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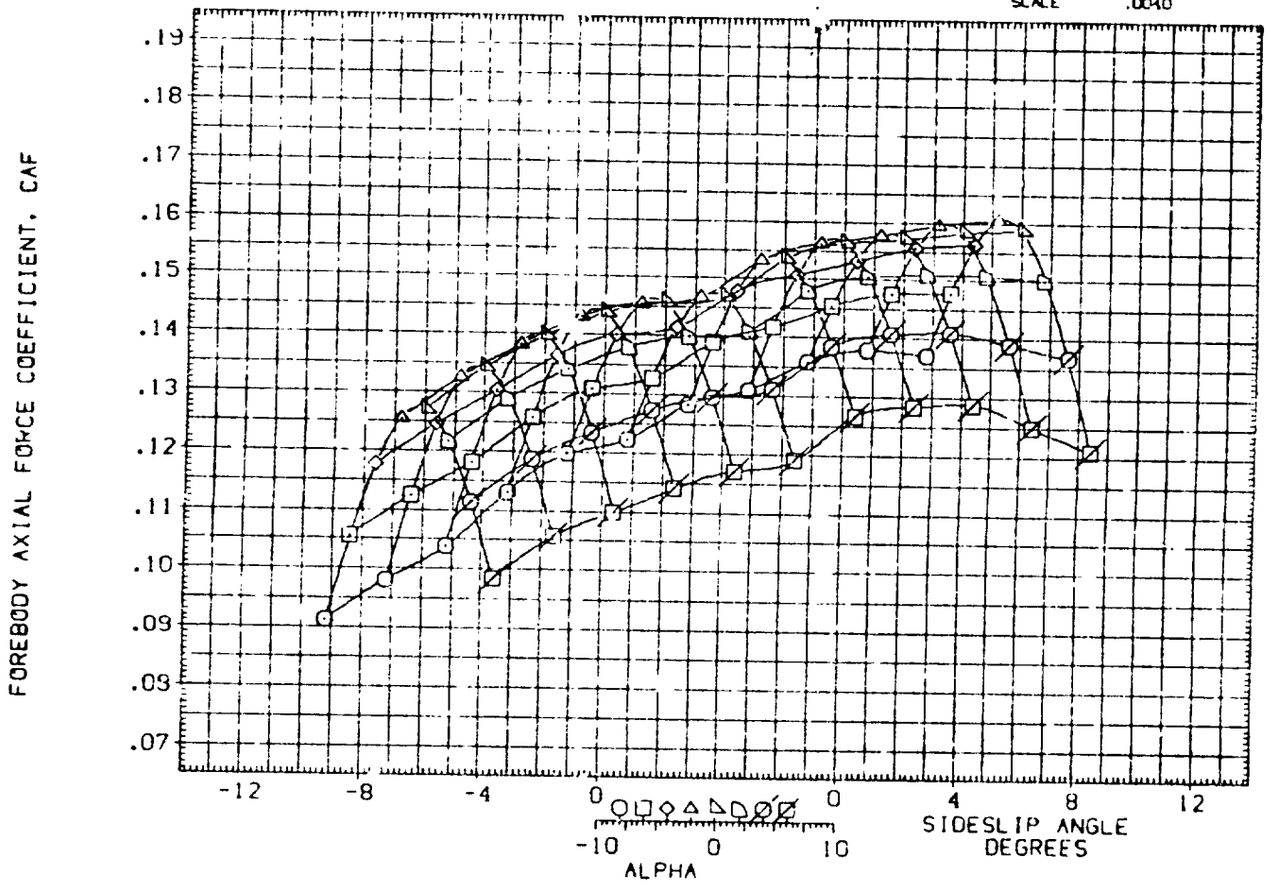
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

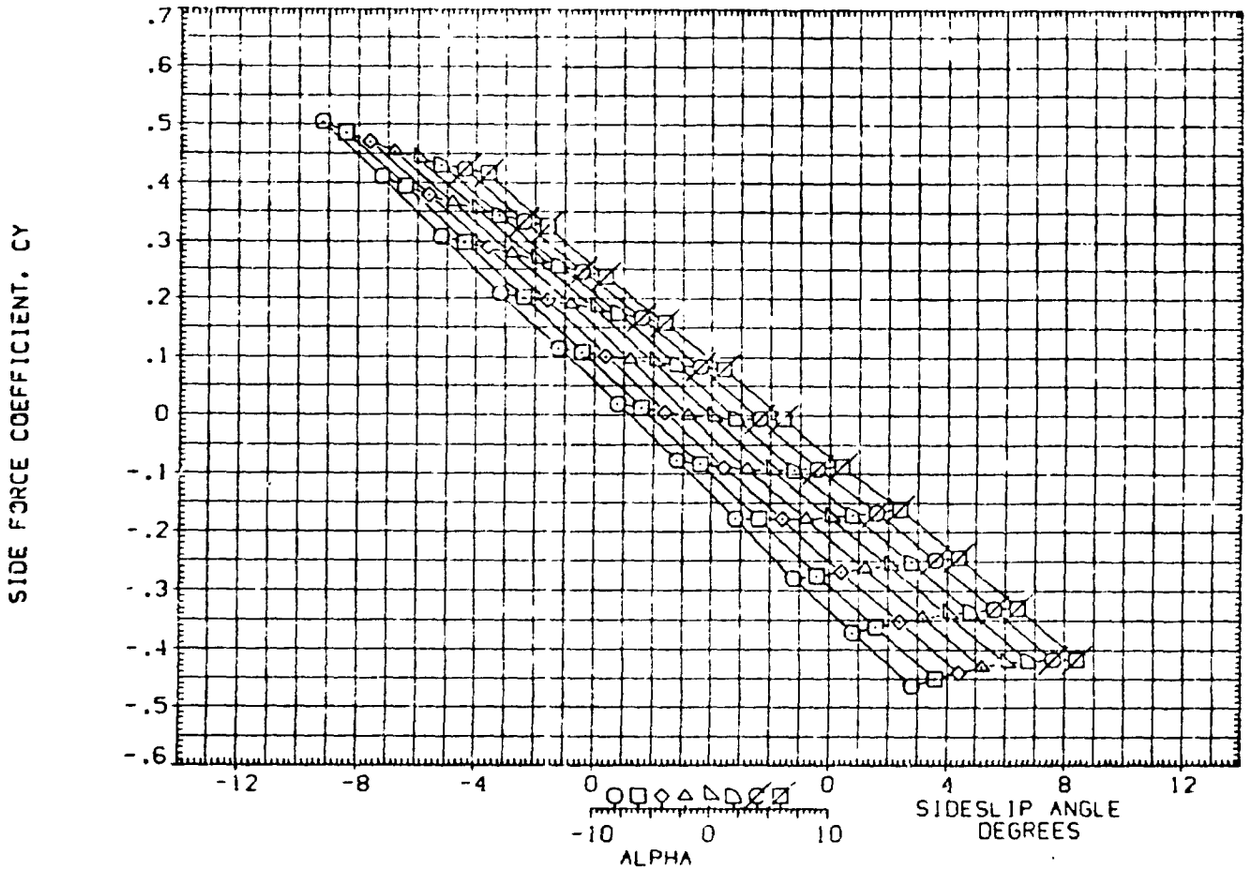
MSFC TMT 622 (IA125) 74 DTS. MACH NUMBER = 0.90 (SINO90)

PARAMETRIC VA

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

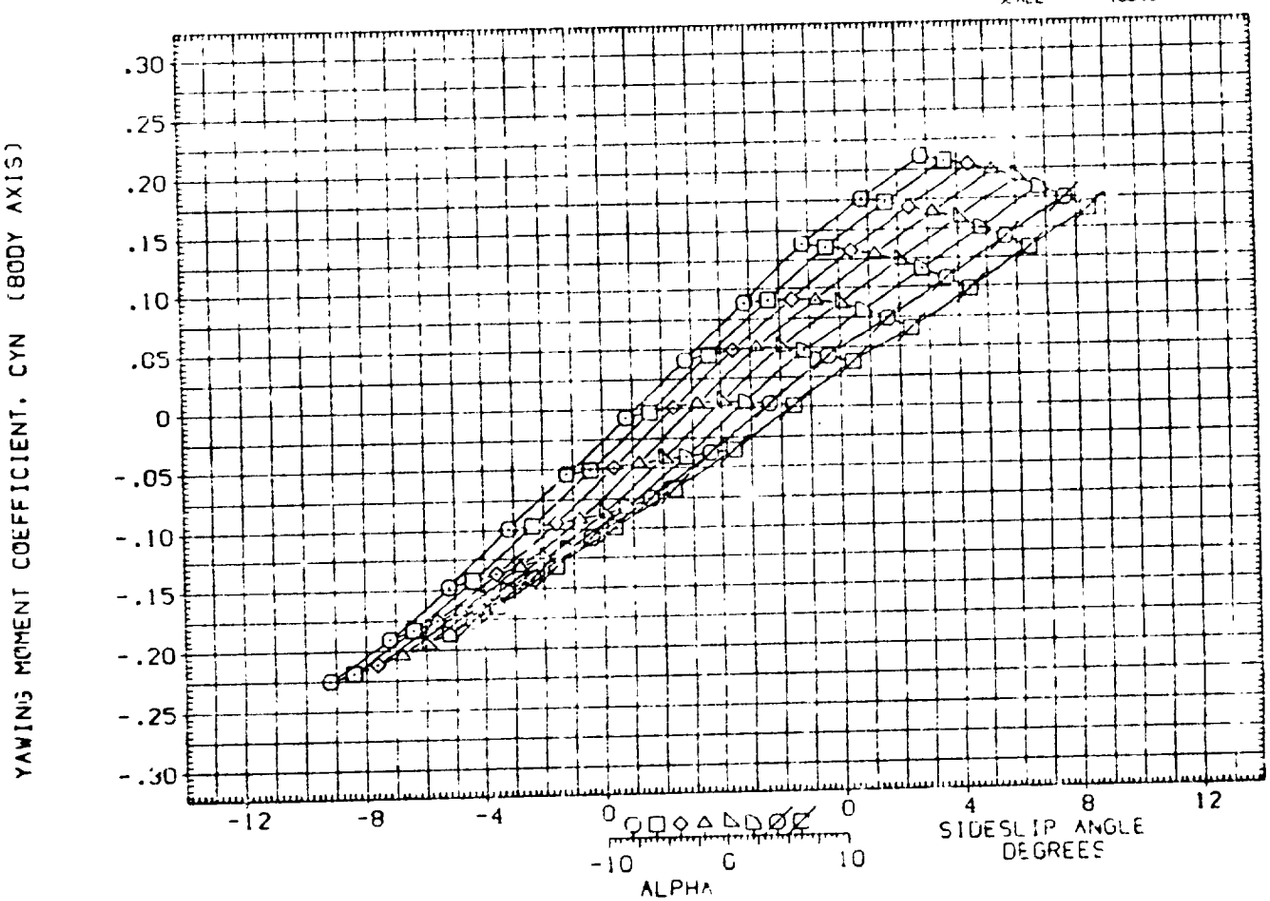
MSFC TWT 622 (IA125) 74 OTS, MACH NUMBER = 0.90 (SIN090)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.6100	INCHES
BREF	1290.6100	INCHES
XMRP	9[illegible].5000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

MSFC TWT 622 (A125) 74 OTS, MACH NUMBER = 0.90 (SING90)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
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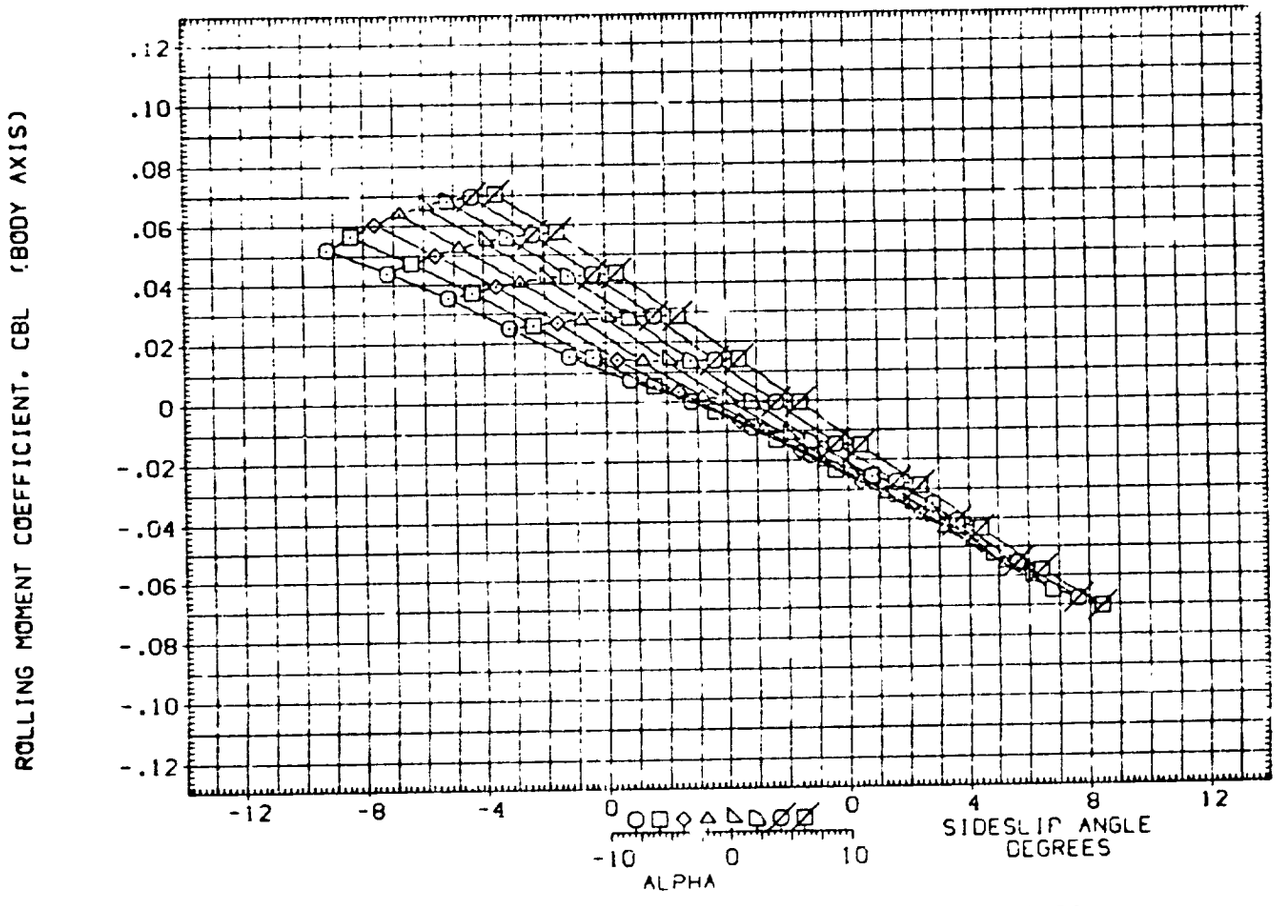
YMRP	.0000	IN YT
ZMRP	400.0000	IN ZT
SCALE	.3040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

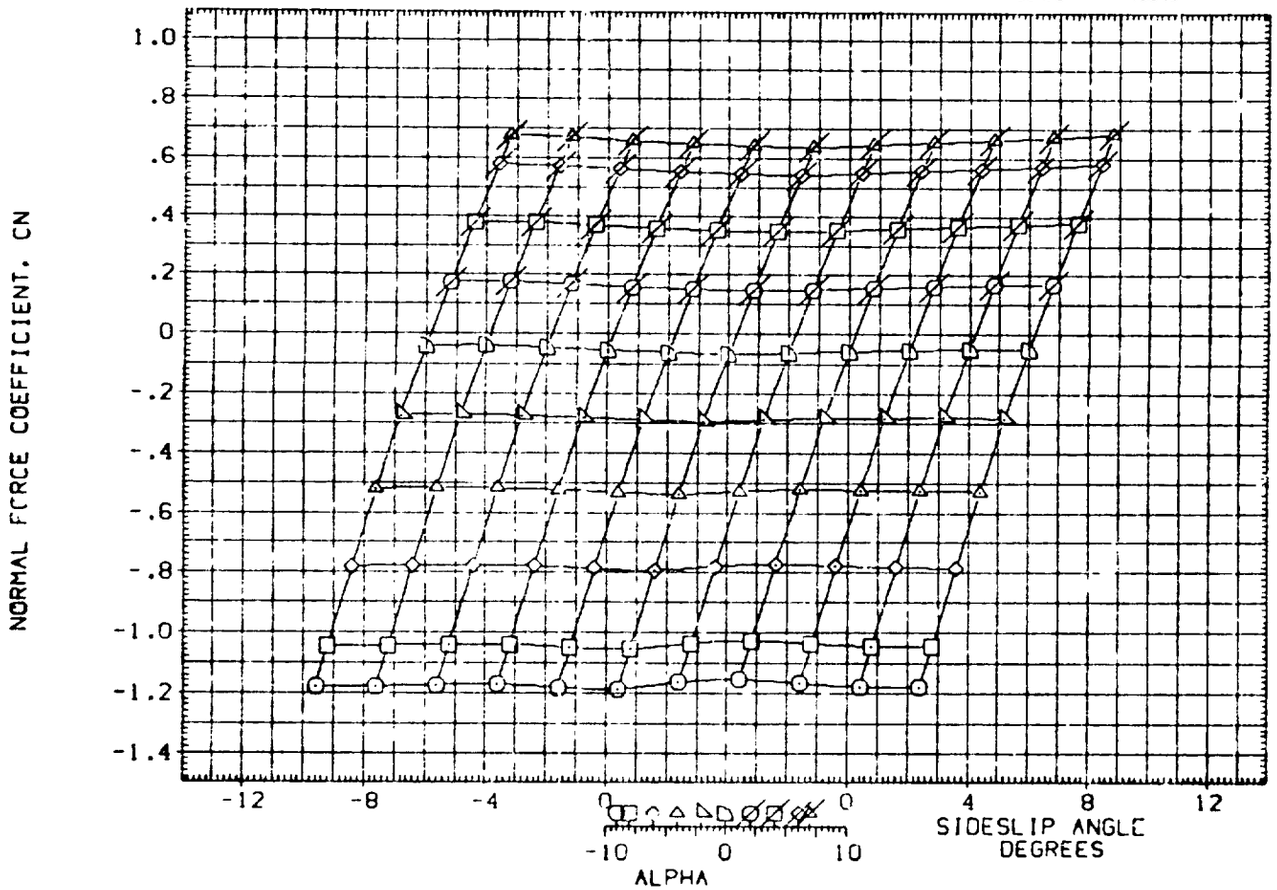
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.05 (S1N105)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

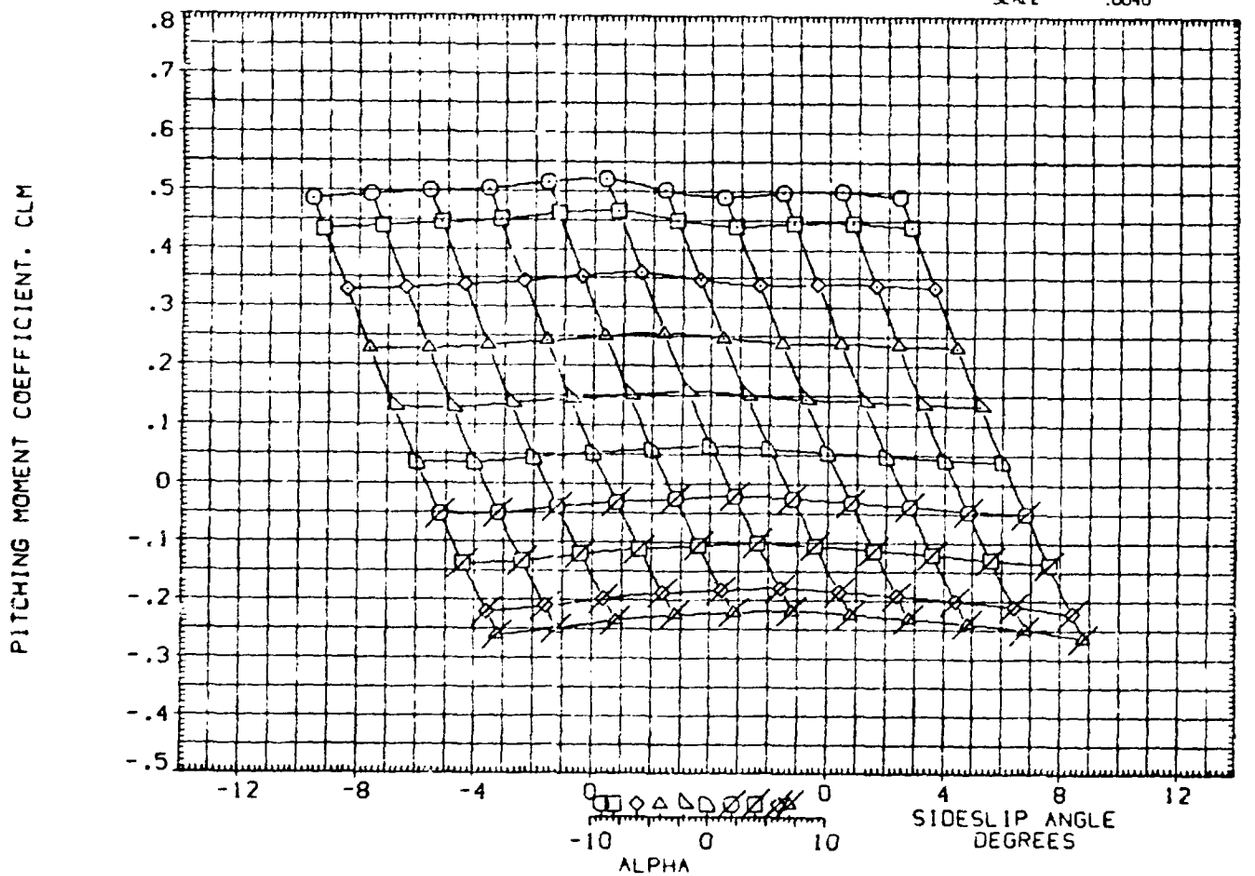
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.05 (SIN105)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

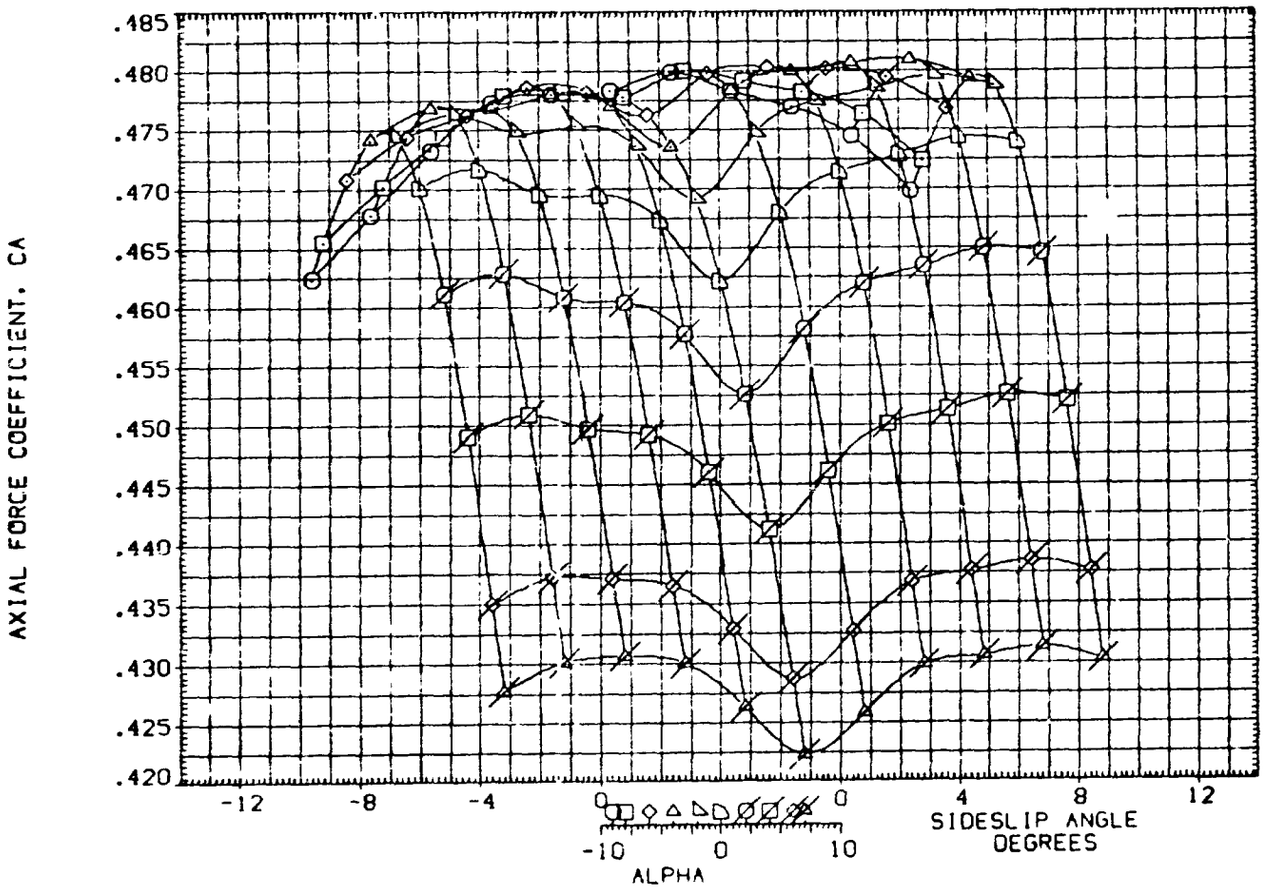
MSFC TWT 622 (IA125) 74 OTS, MACH NUMBER = 1.05 (S1N105)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

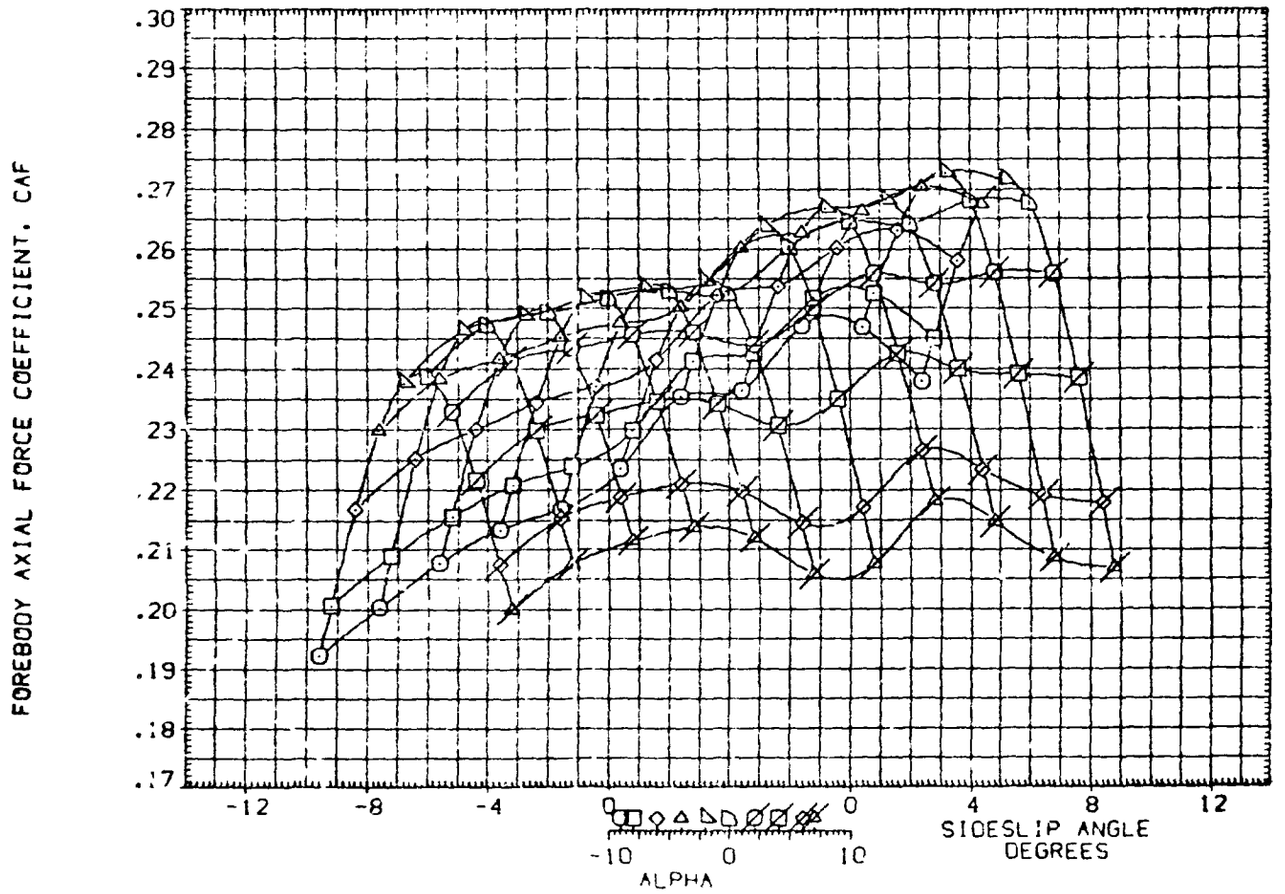
MSFC TWT 622 (:A125) 74 OTS, MACH NUMBER = 1.05 (S1N105)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

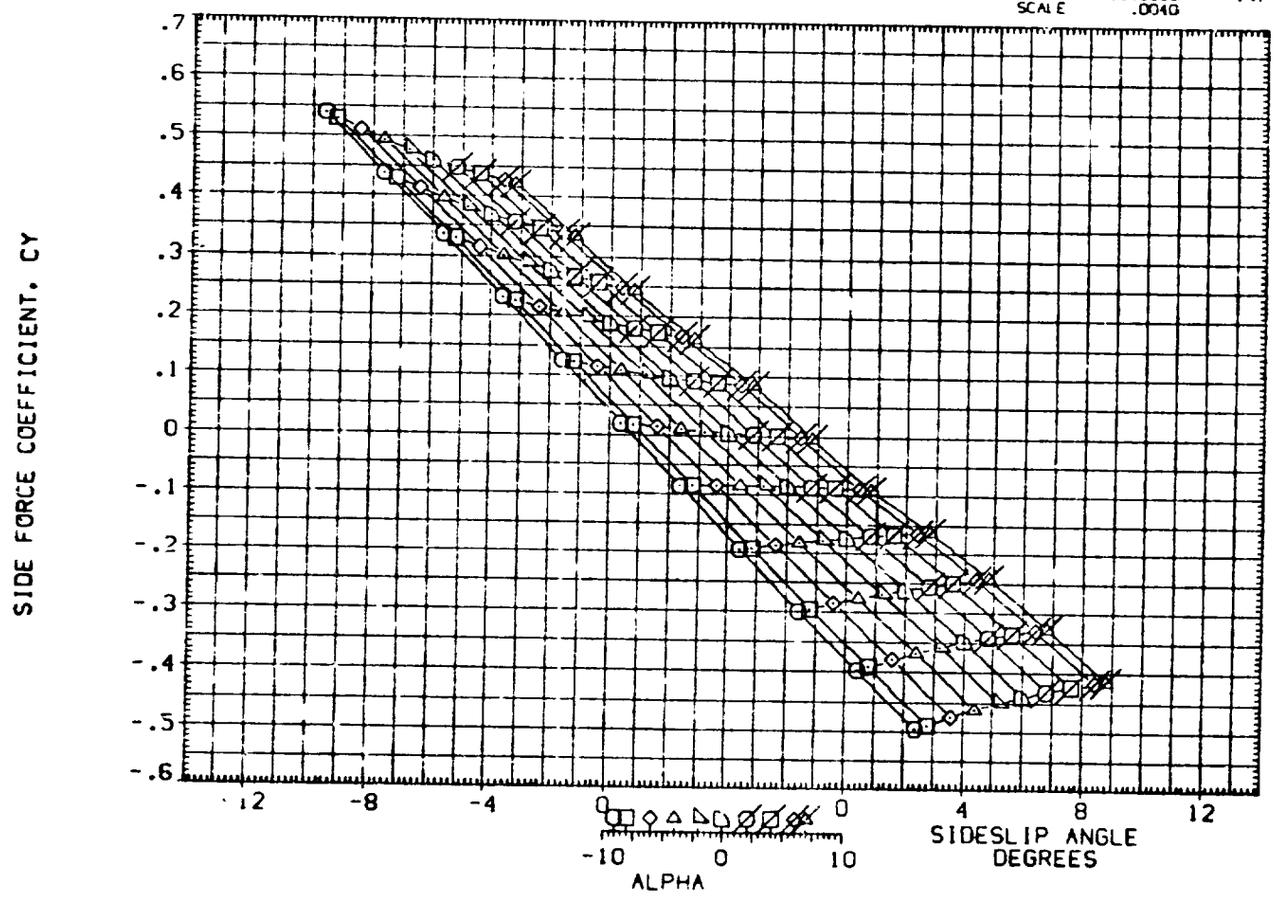
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.05 (SIN105)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

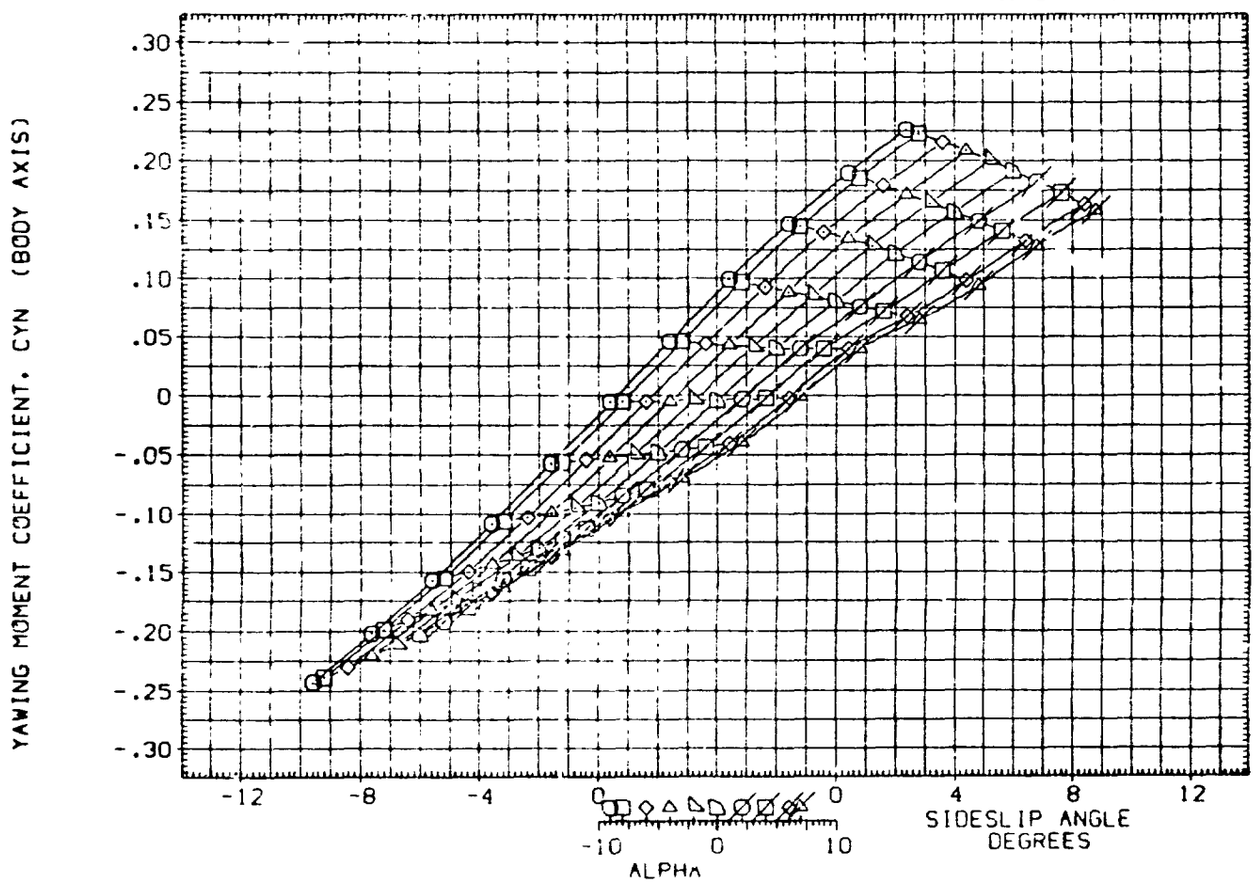
SPEC TEST 622 (A125) 74 CTS, MACH NUMBER = 1.05 (SIN105)

PARAMETRIC VALUES

ELV-IL	9.7	ELV-OL	-.317
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.3040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

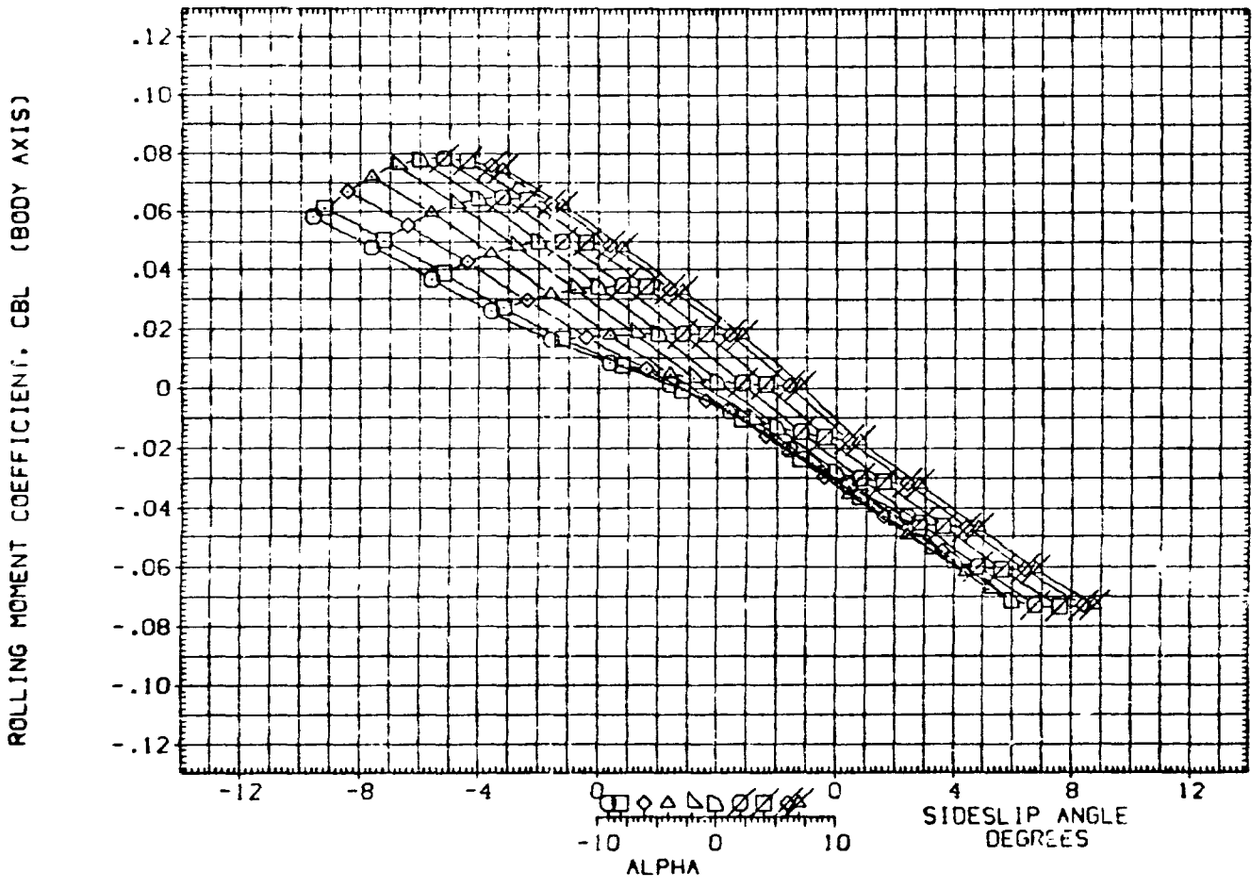
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.05 (S1N105)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

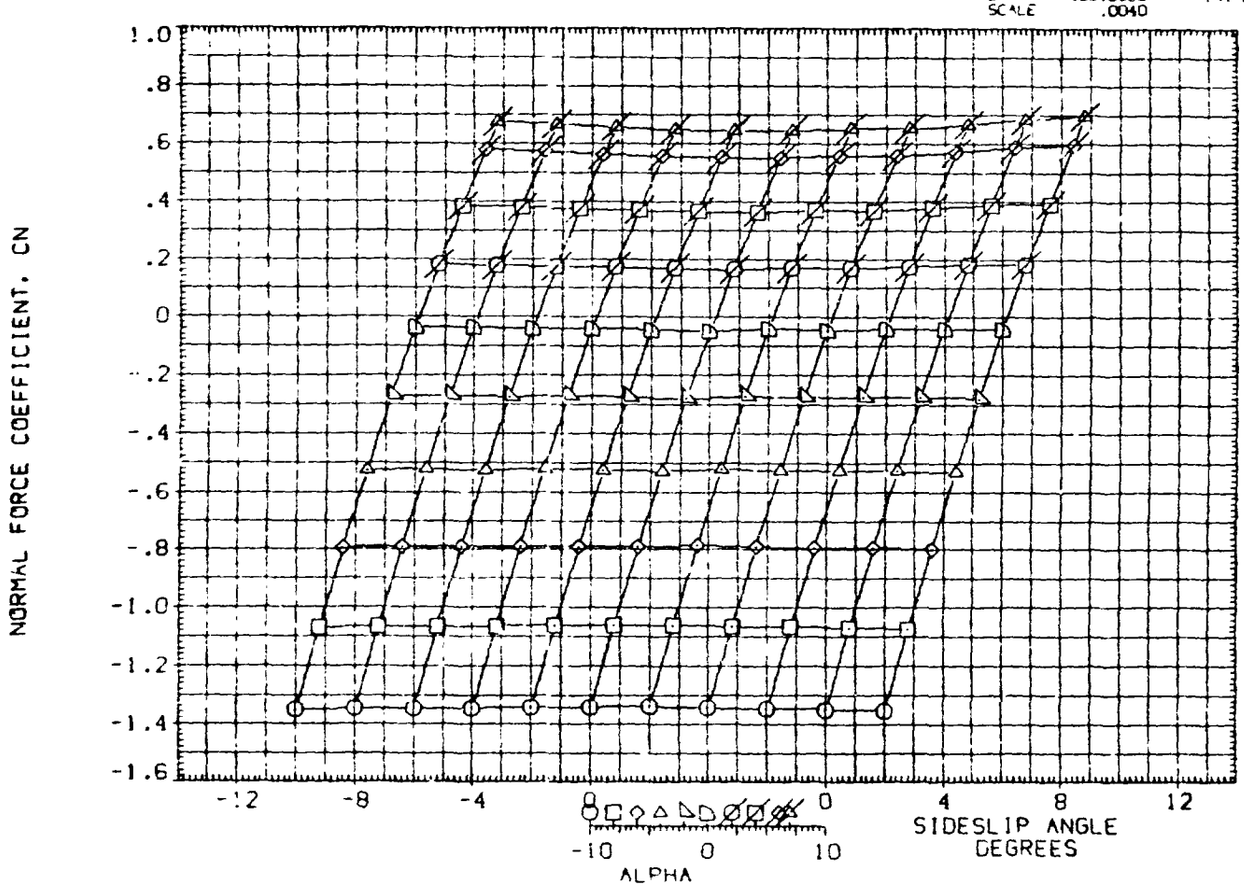
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.20 (SIN120)

PARAMETRIC VALUES

ELV-1L	-.917	ELV-0L	-.917
ELV-1R	.000	ELV-0R	.000

PEFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

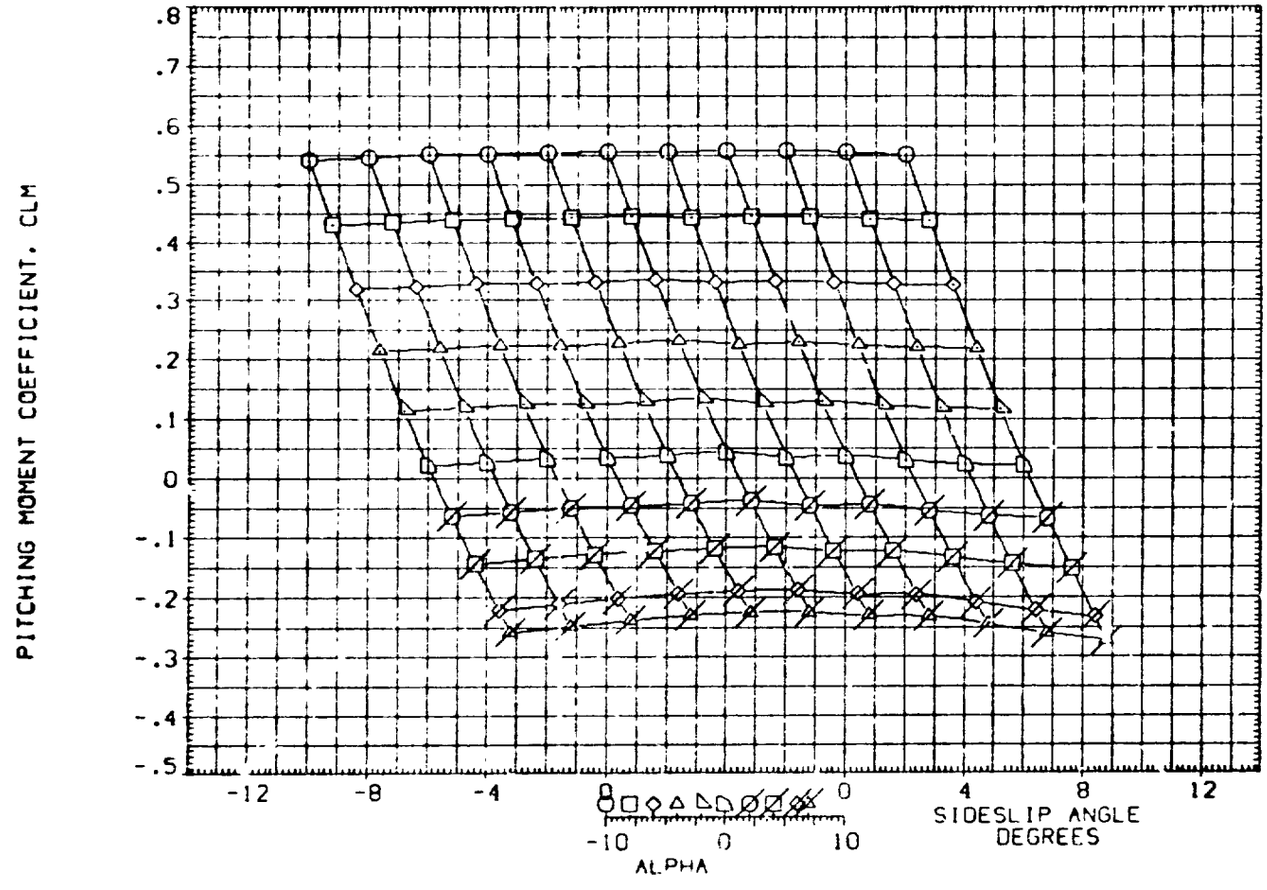
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.20 (SIN120)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

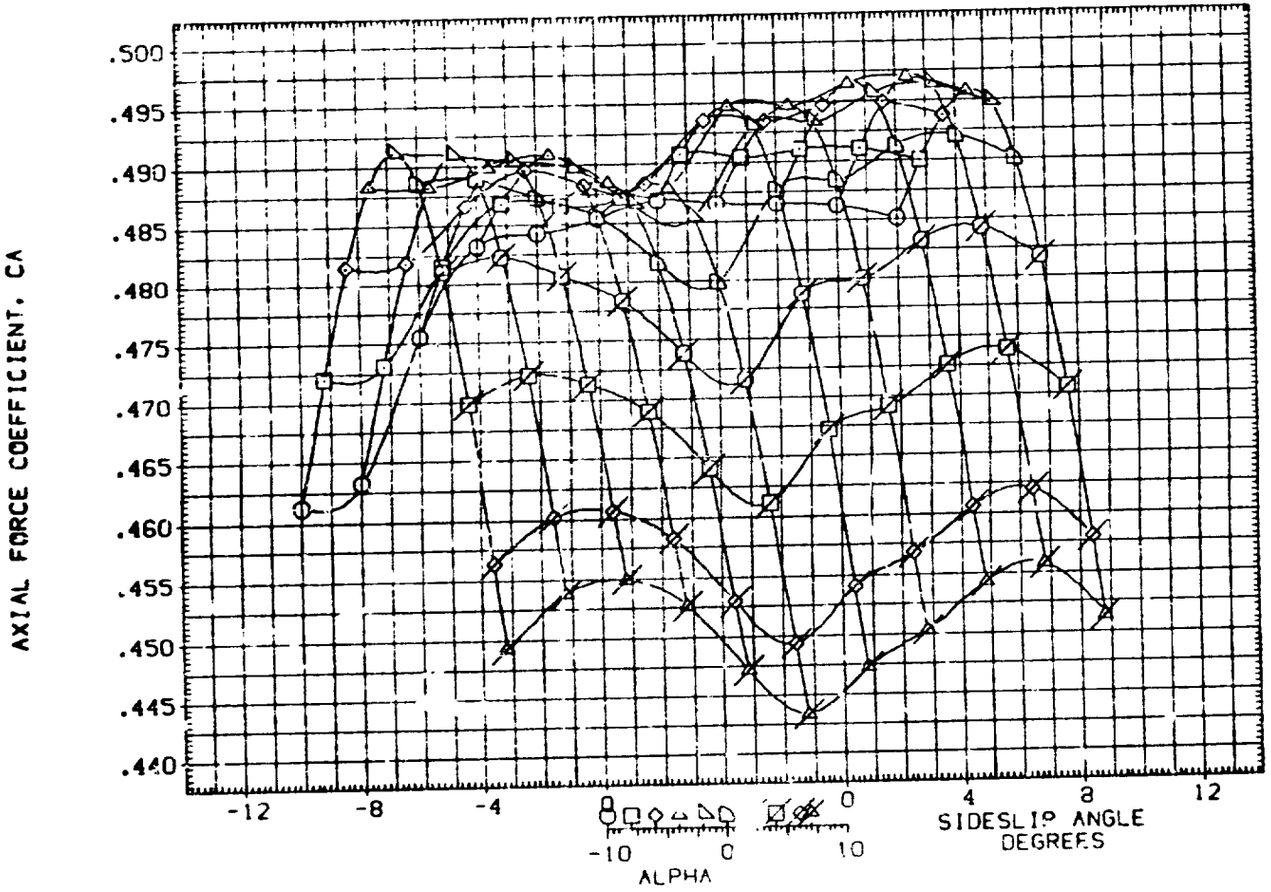
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.20 (S1N120)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

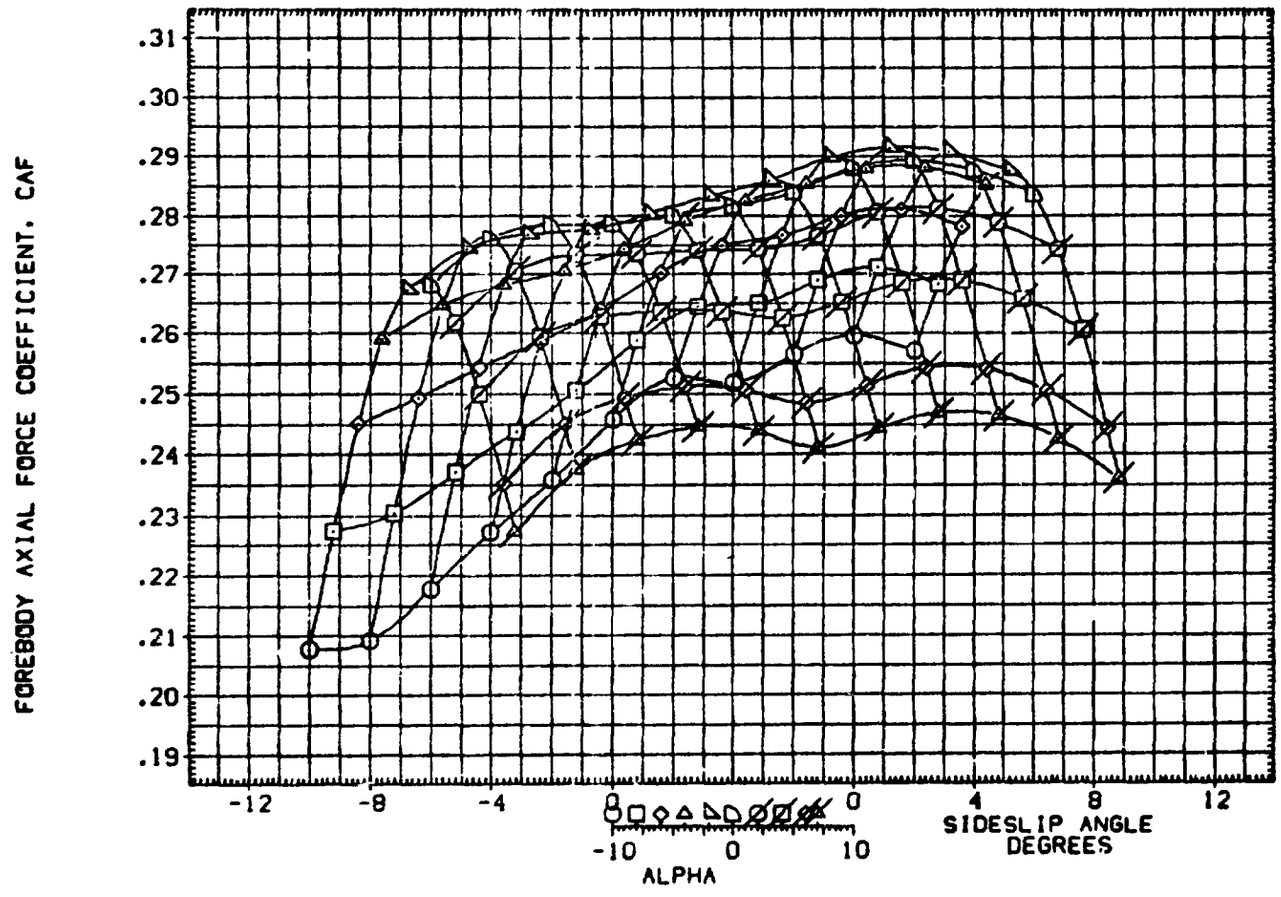
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.20 (SIN120)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.300

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

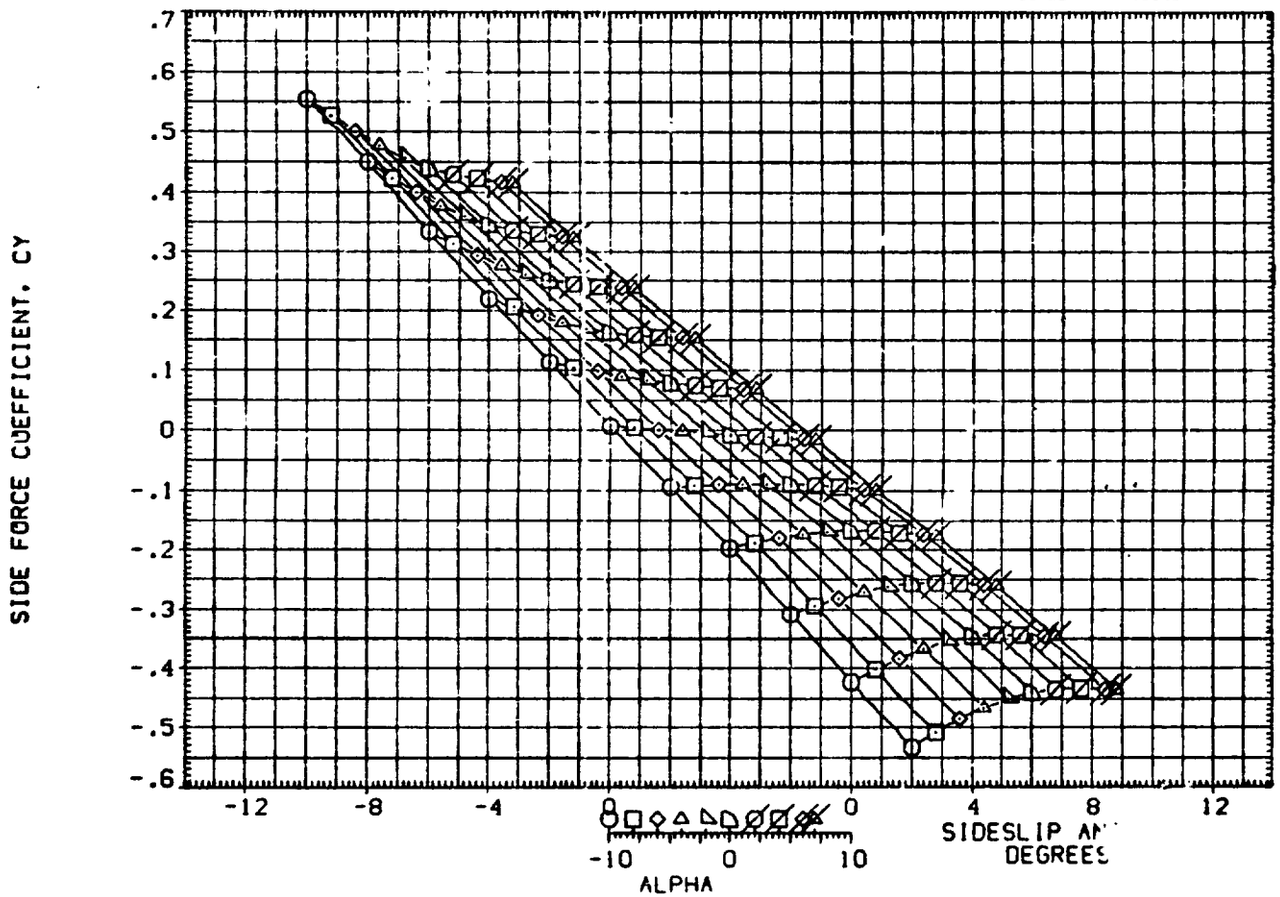
MSFC TWT 622 (IA!25) 74 OTS. MACH NUMBER = 1.20 (S1N120)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

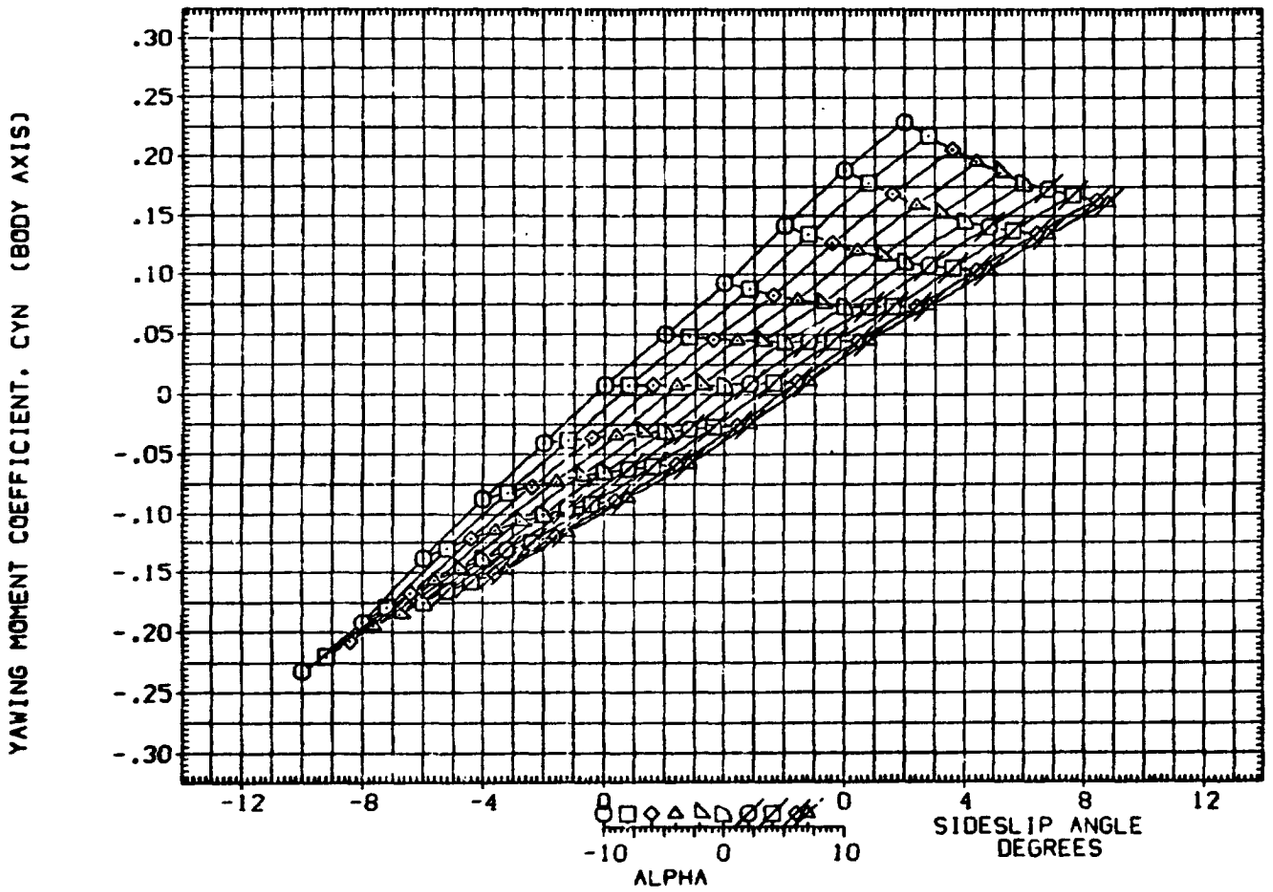
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.20 (SIN120)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

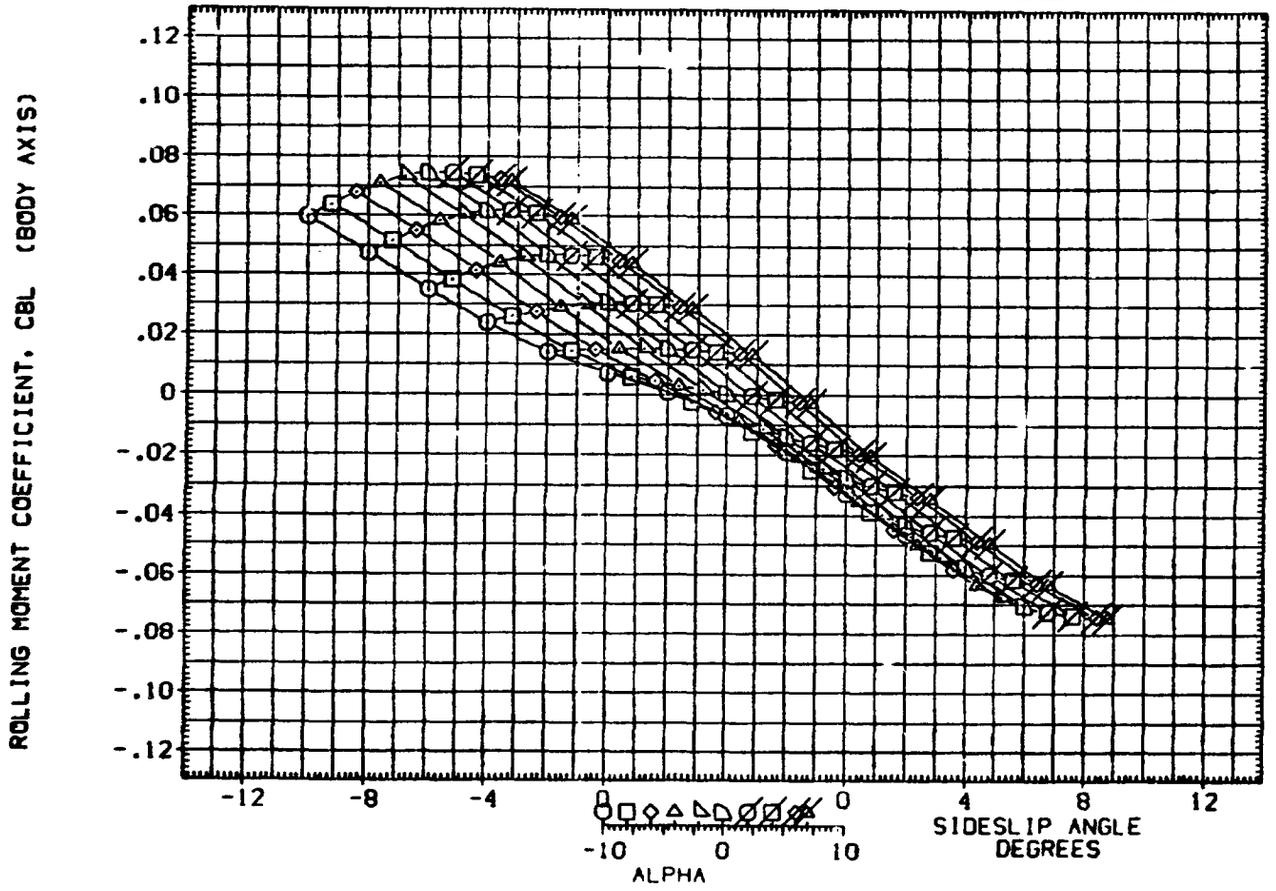
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.20 (SIN120)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

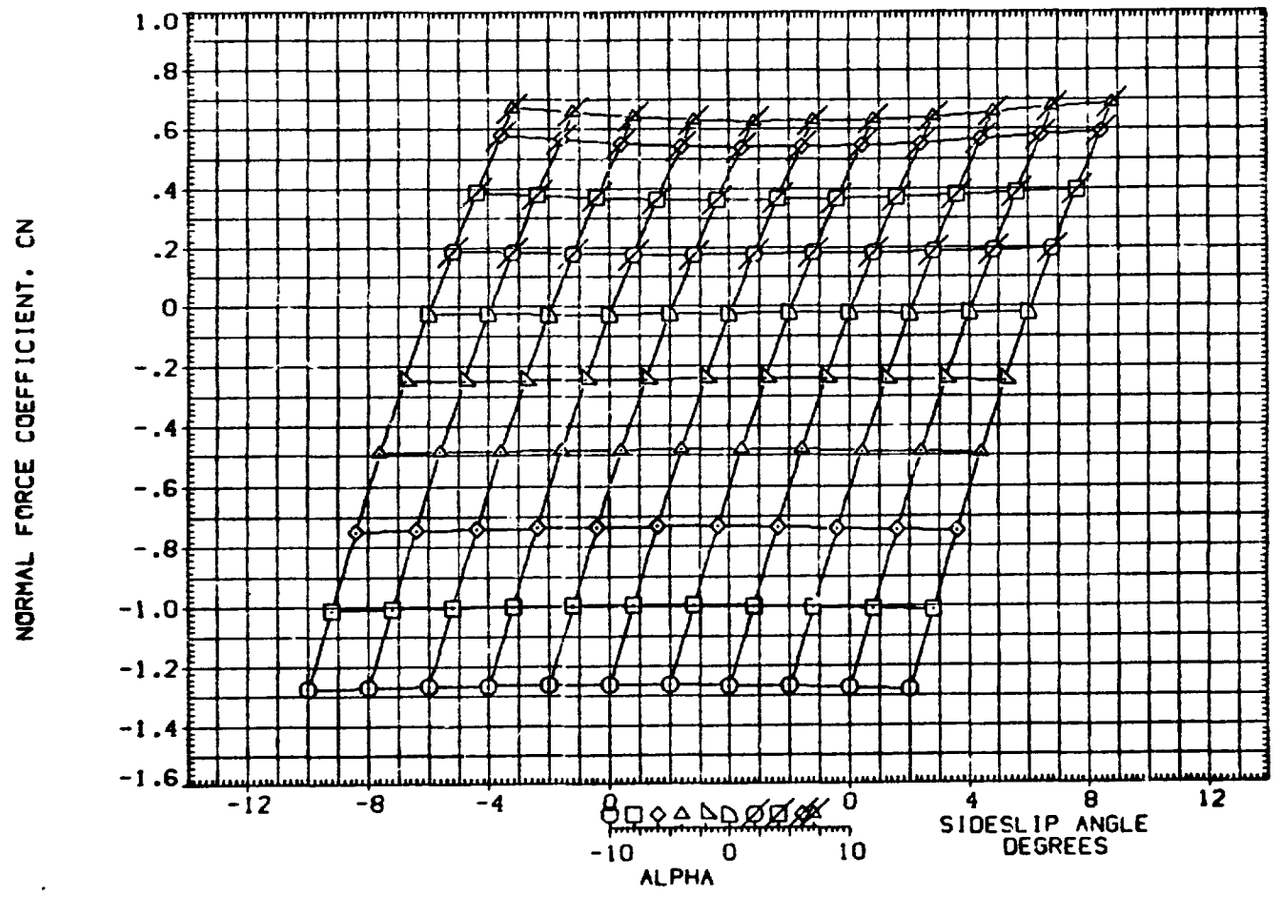
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.46 (S1N146)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

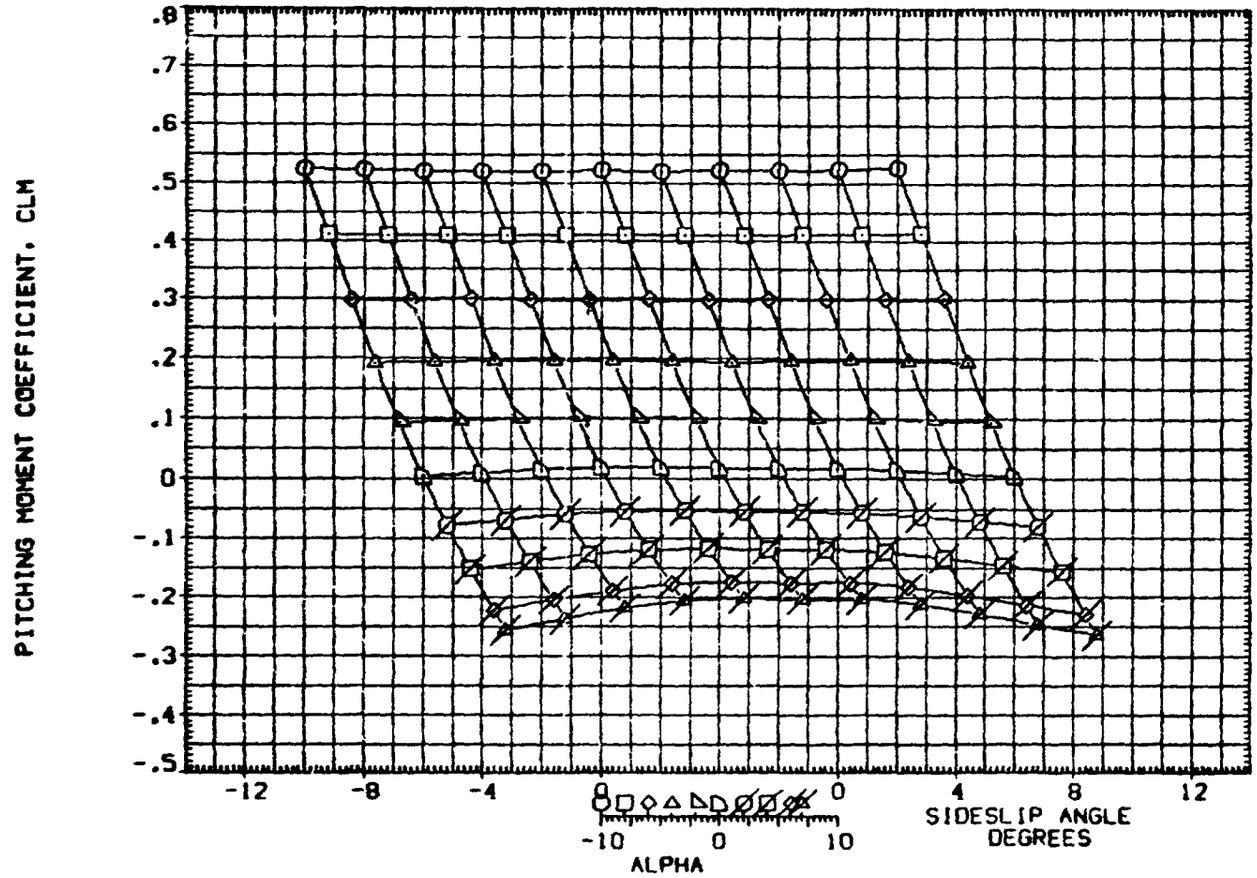
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.46 (SIN146)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

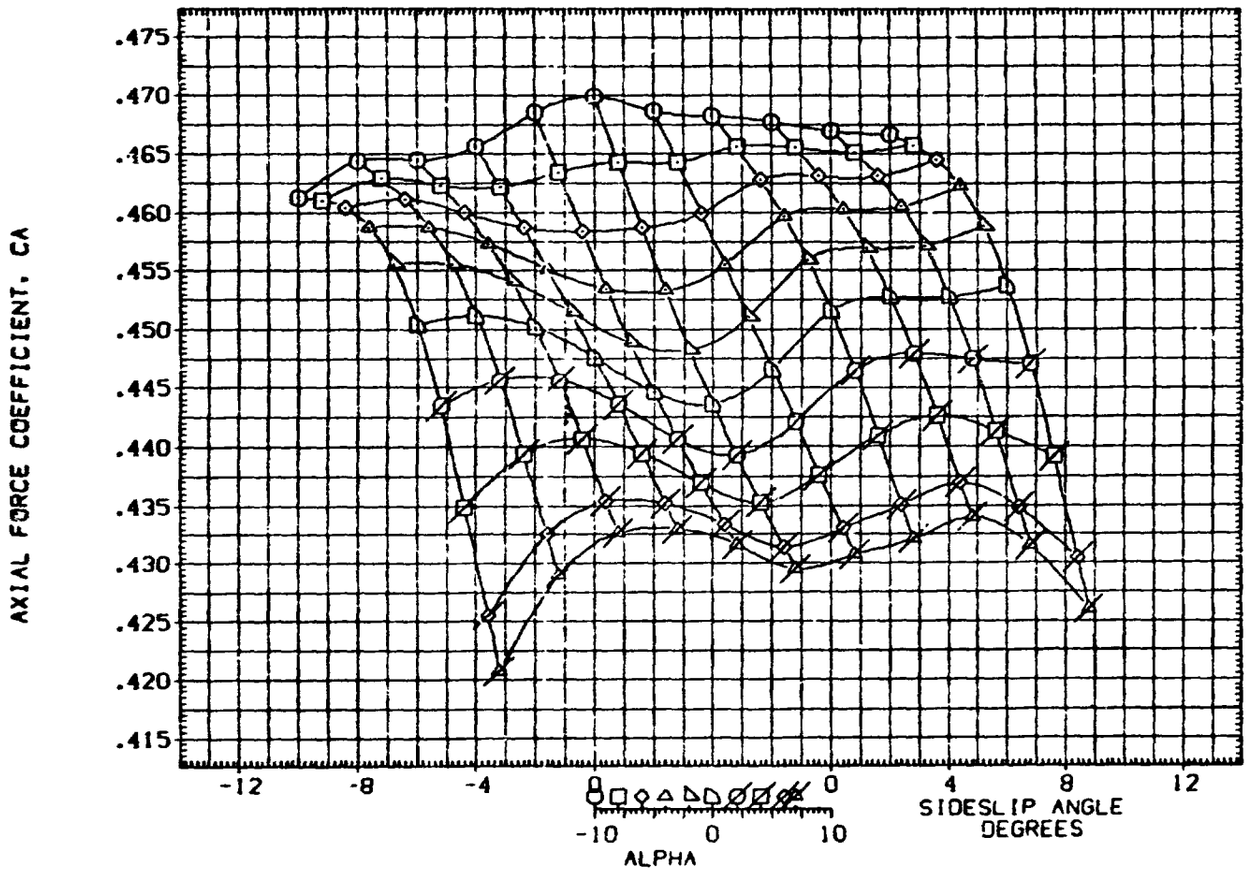
MSFC TWT 622 (IA125) 74 OTS, MACH NUMBER = 1.46 (SIN146)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

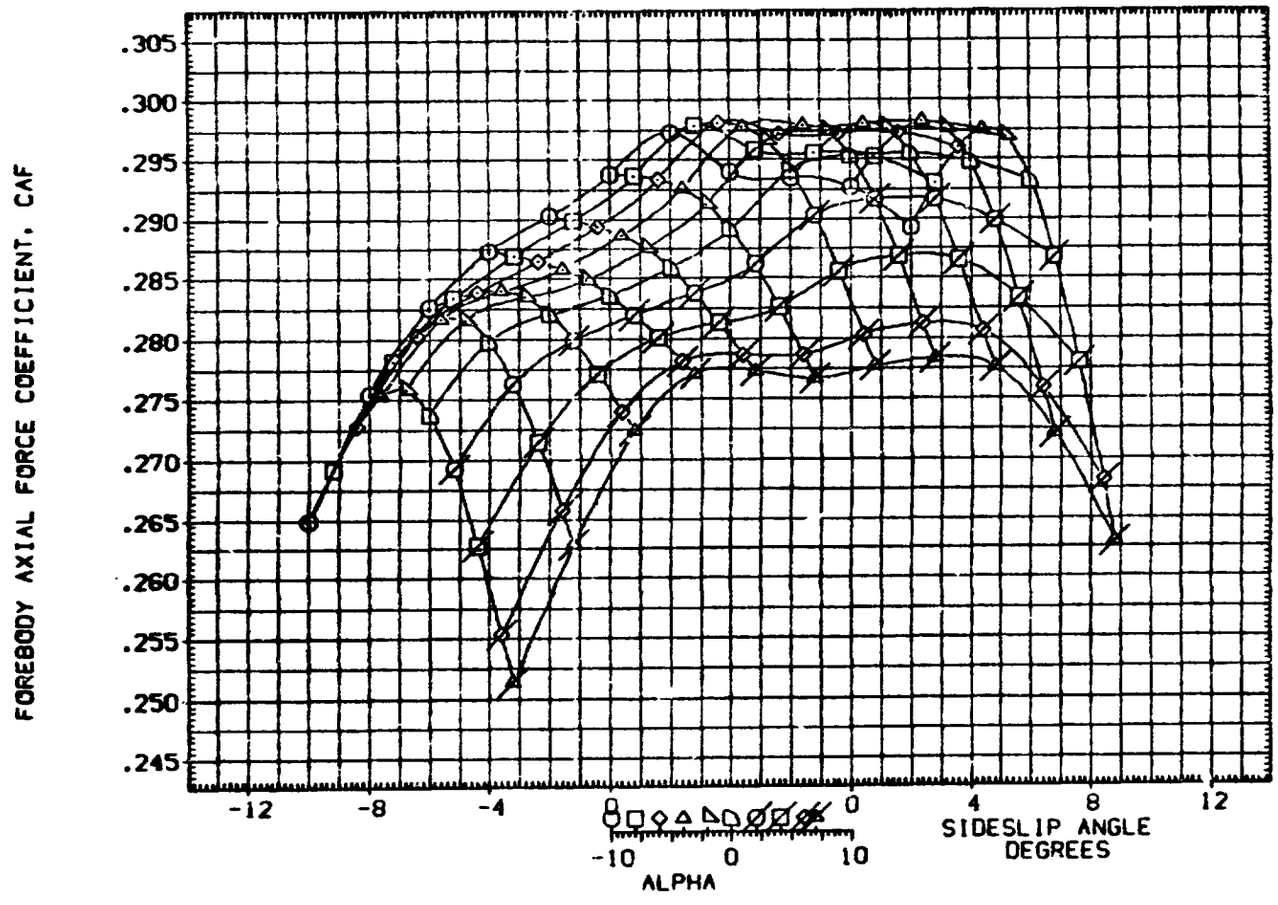
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.46 (SIN146)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	576.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

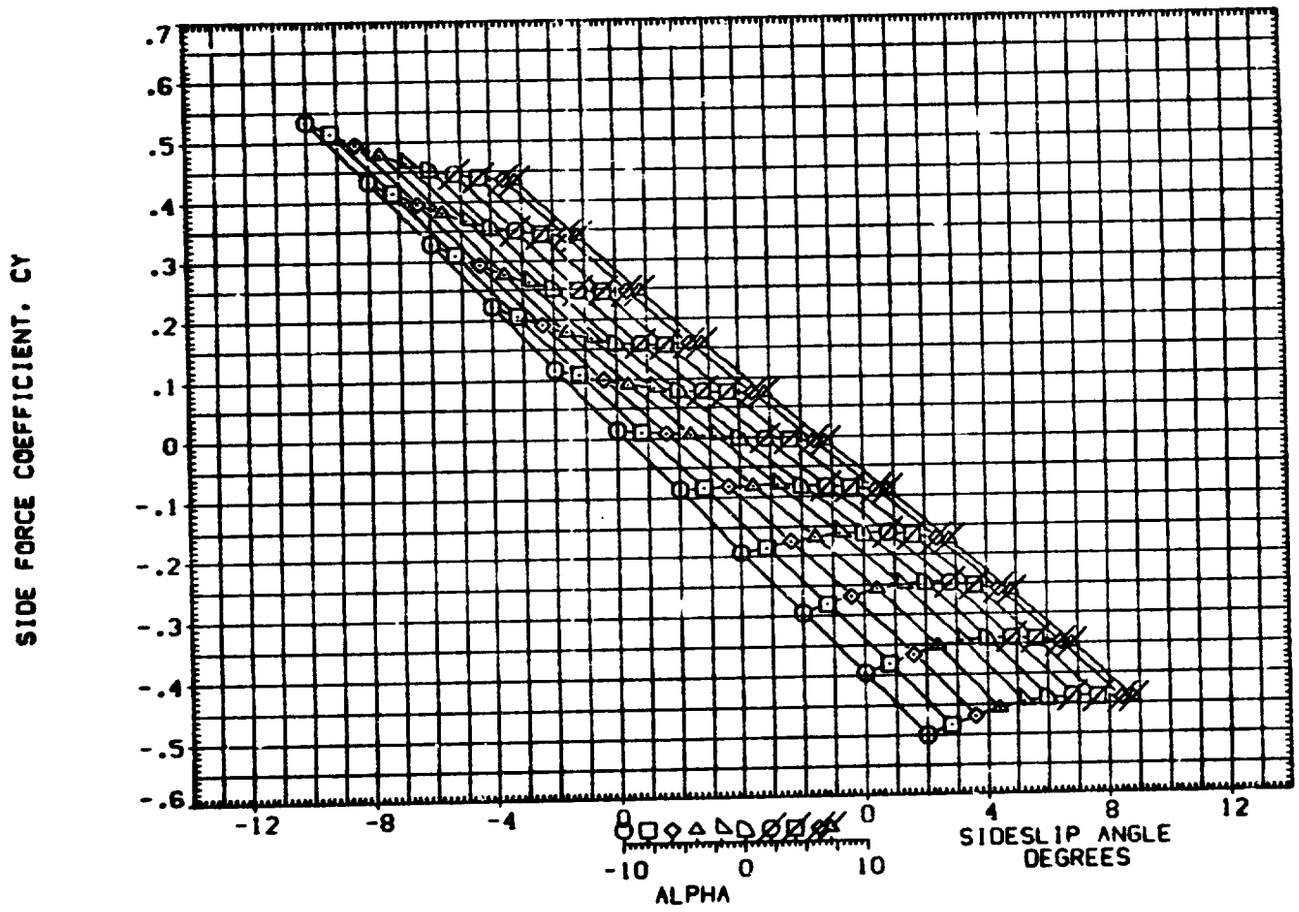
MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.46 (SIN146)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	000

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

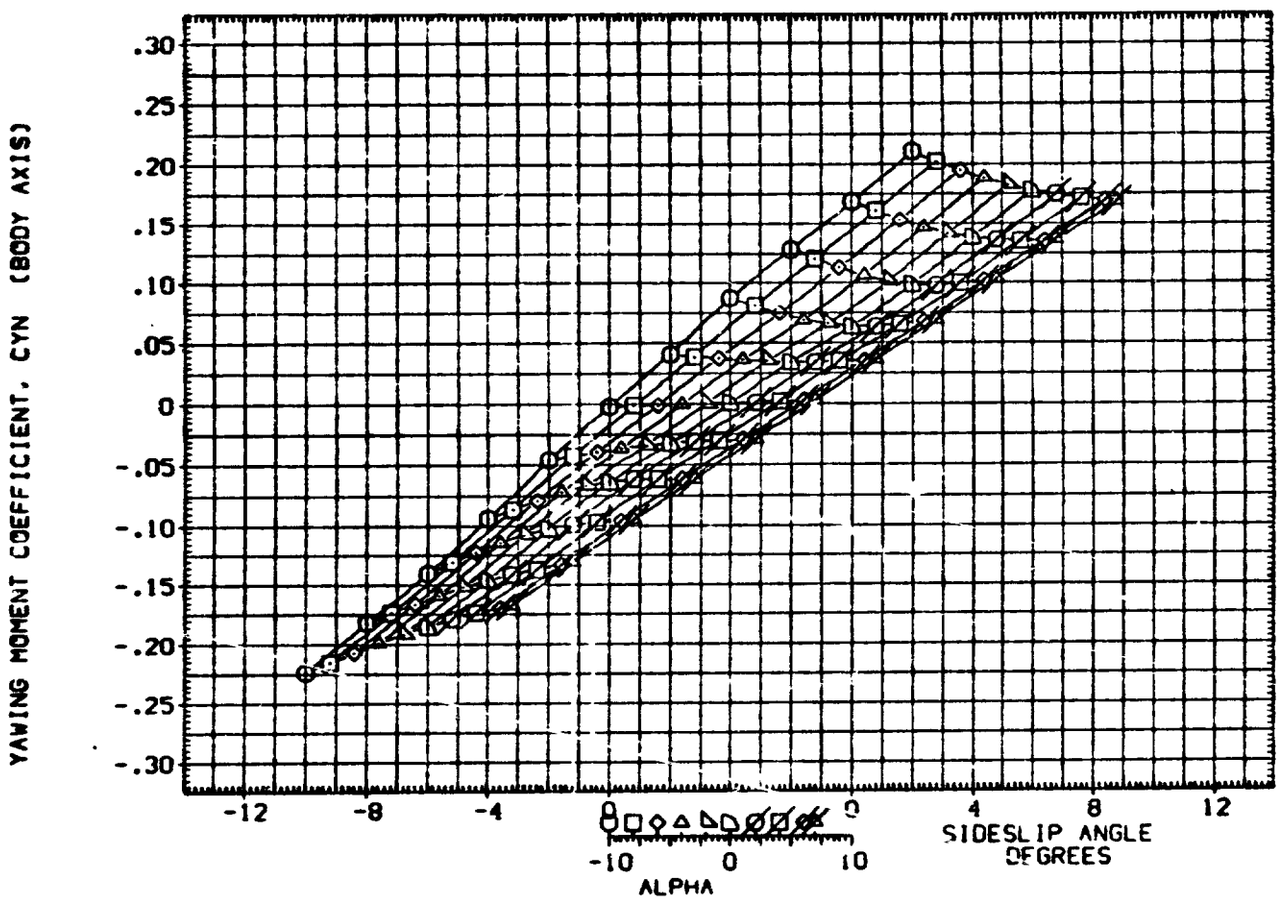
MSFC TWT 622 (IA125) 74 OTS, MACH NUMBER = 1.46 (SIN146)

PARAMETRIC VALUES

ELV-IL	-.917	ELV-OL	-.917
ELV-IR	.000	ELV-OR	.000

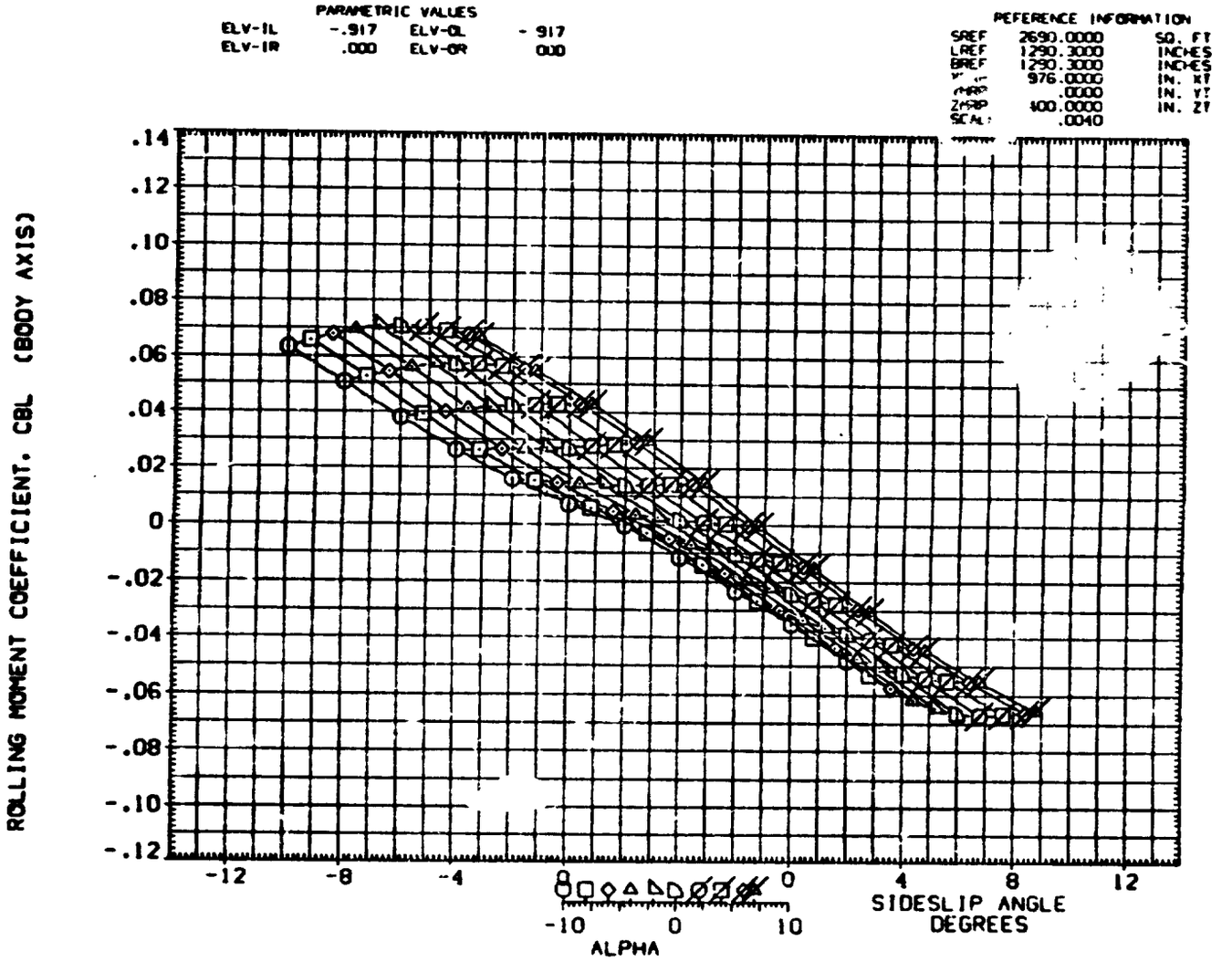
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



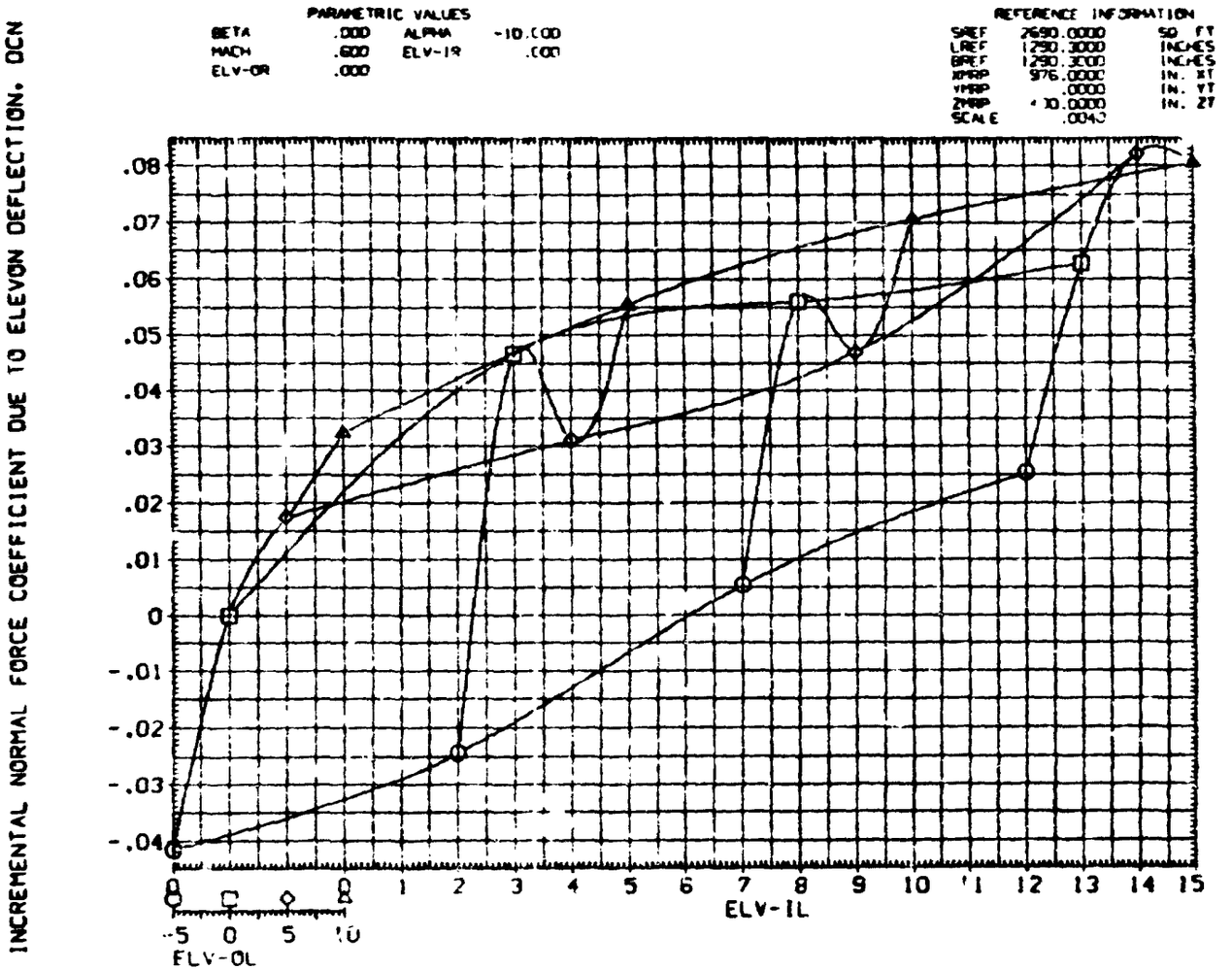
EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

MSFC TWT 622 (IA125) 74 OTS. MACH NUMBER = 1.46 (SIN146)



EFFECT OF ANGLE OF ATTACK AND ANGLE OF SIDESLIP ON CHARACTERISTICS

MSFC TWT 622 (1A125) 74 OTS, M= 0.6, ALPHA=-10.0(BINBSA)



ELEVON EFFECTIVENESS FOR MACH = 0.6

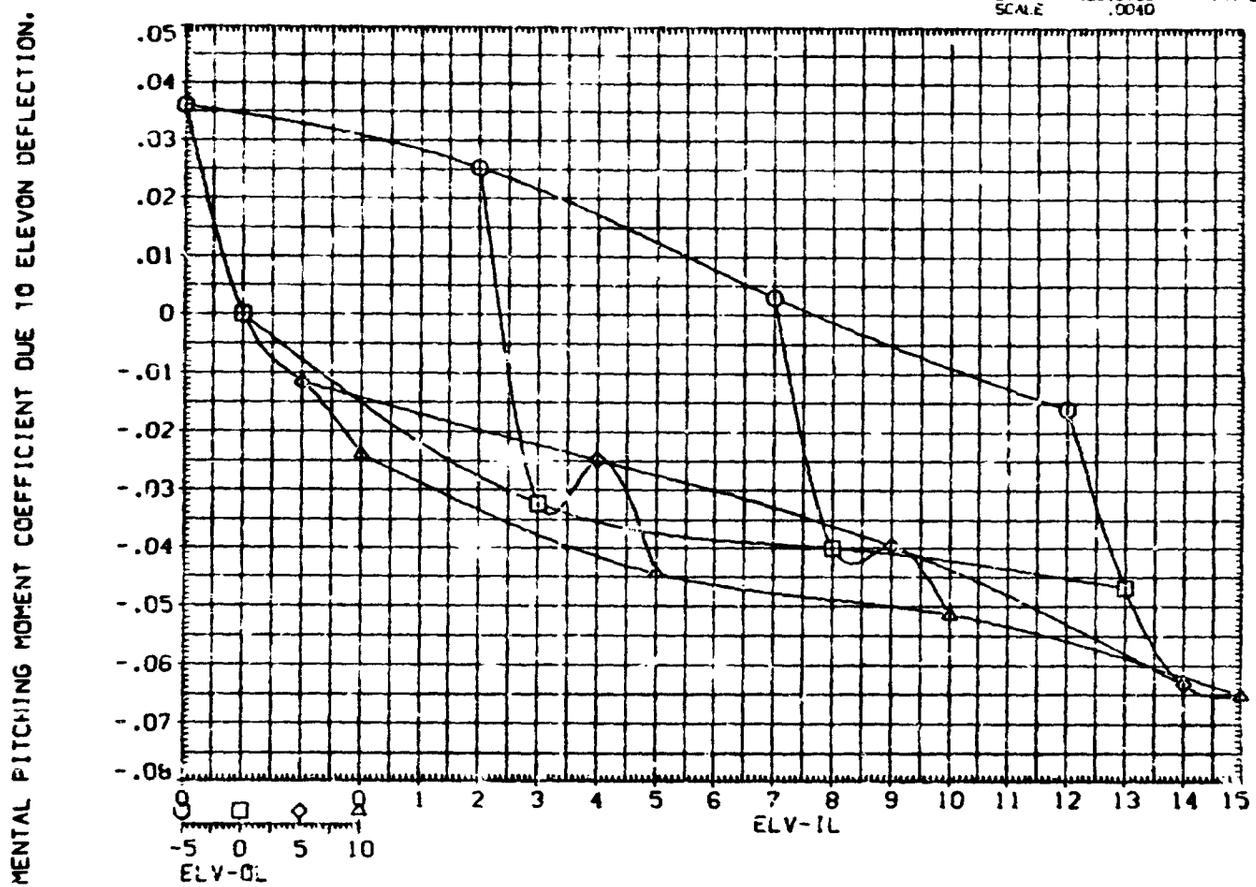
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-10.0(BINBSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

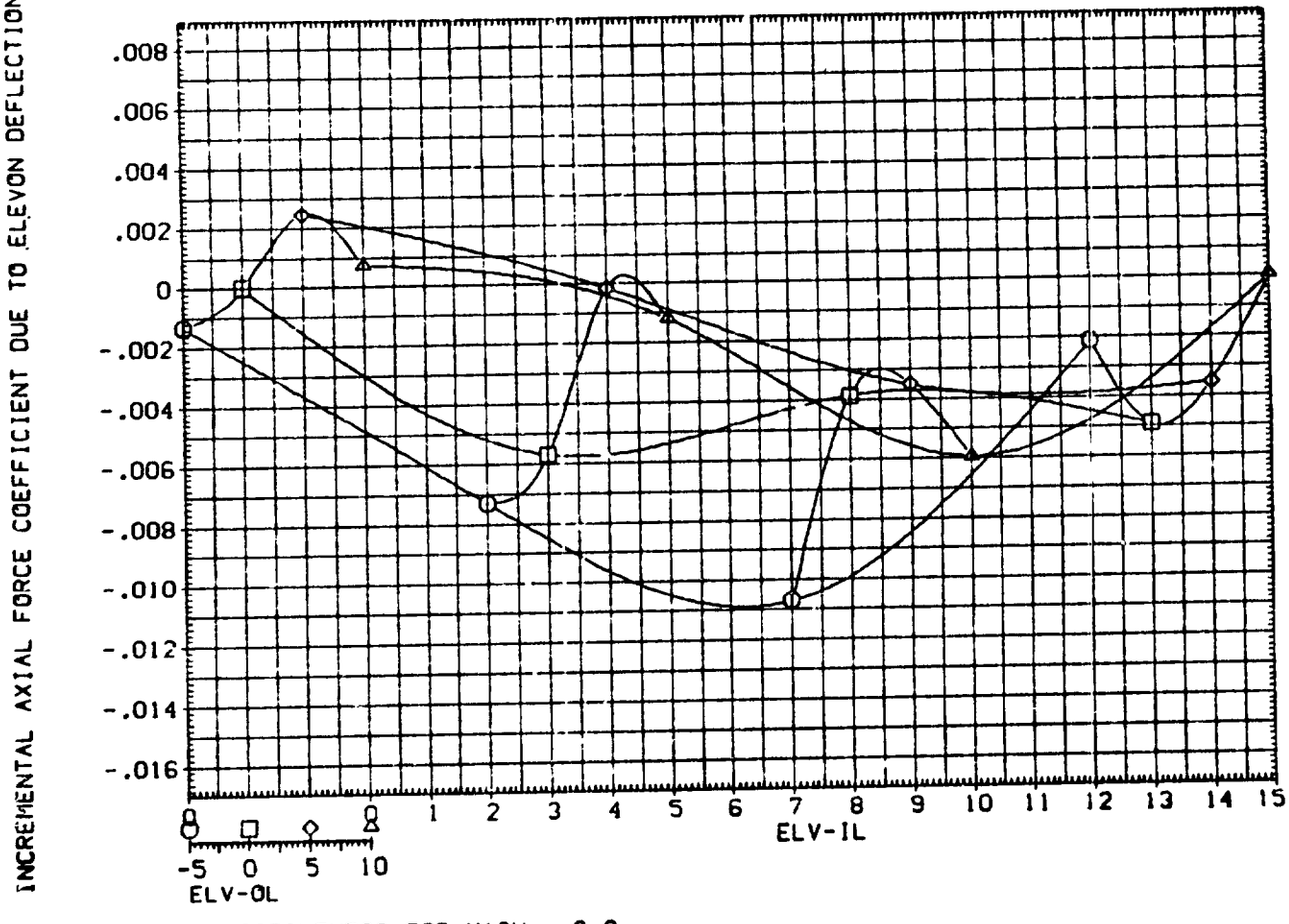
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA=-10.0(BINBSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

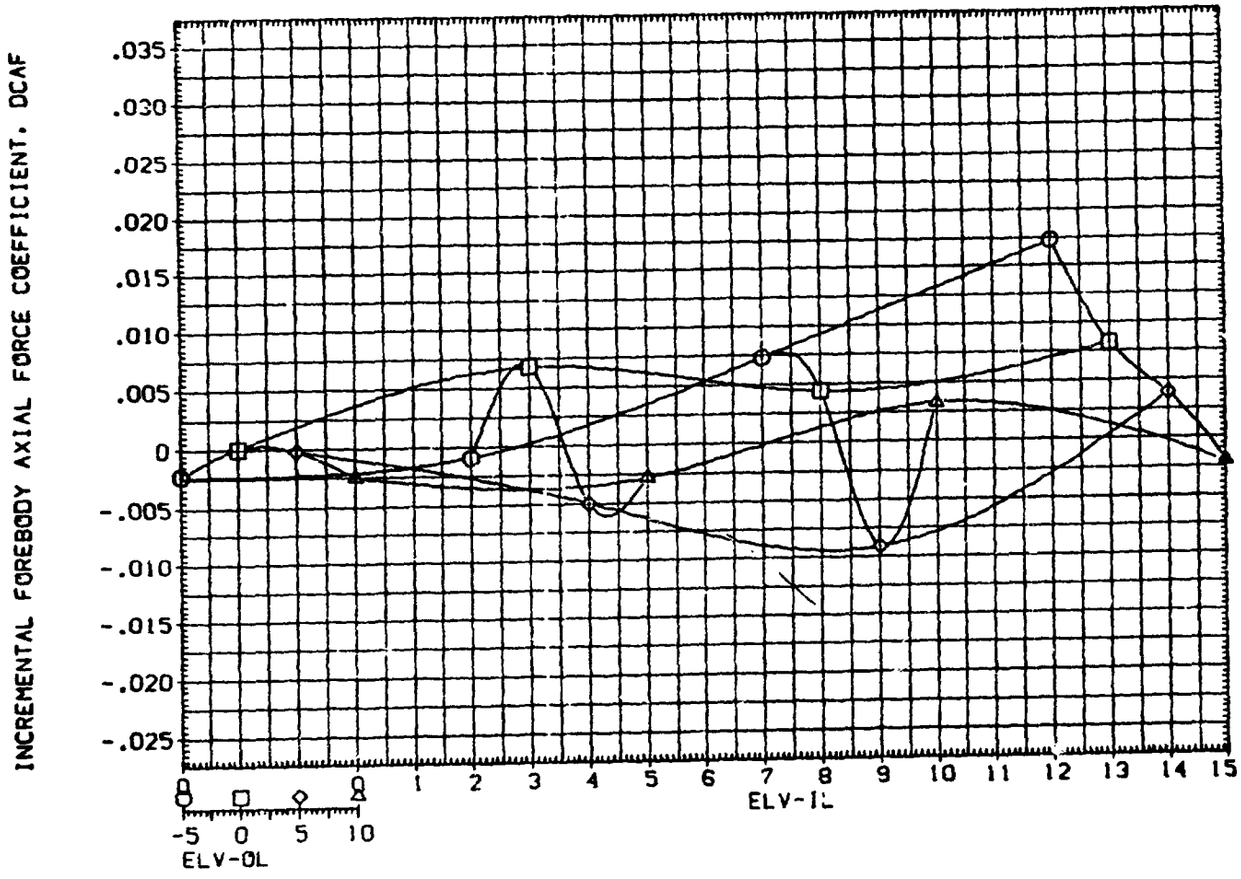
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA=-10.0(BINBSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

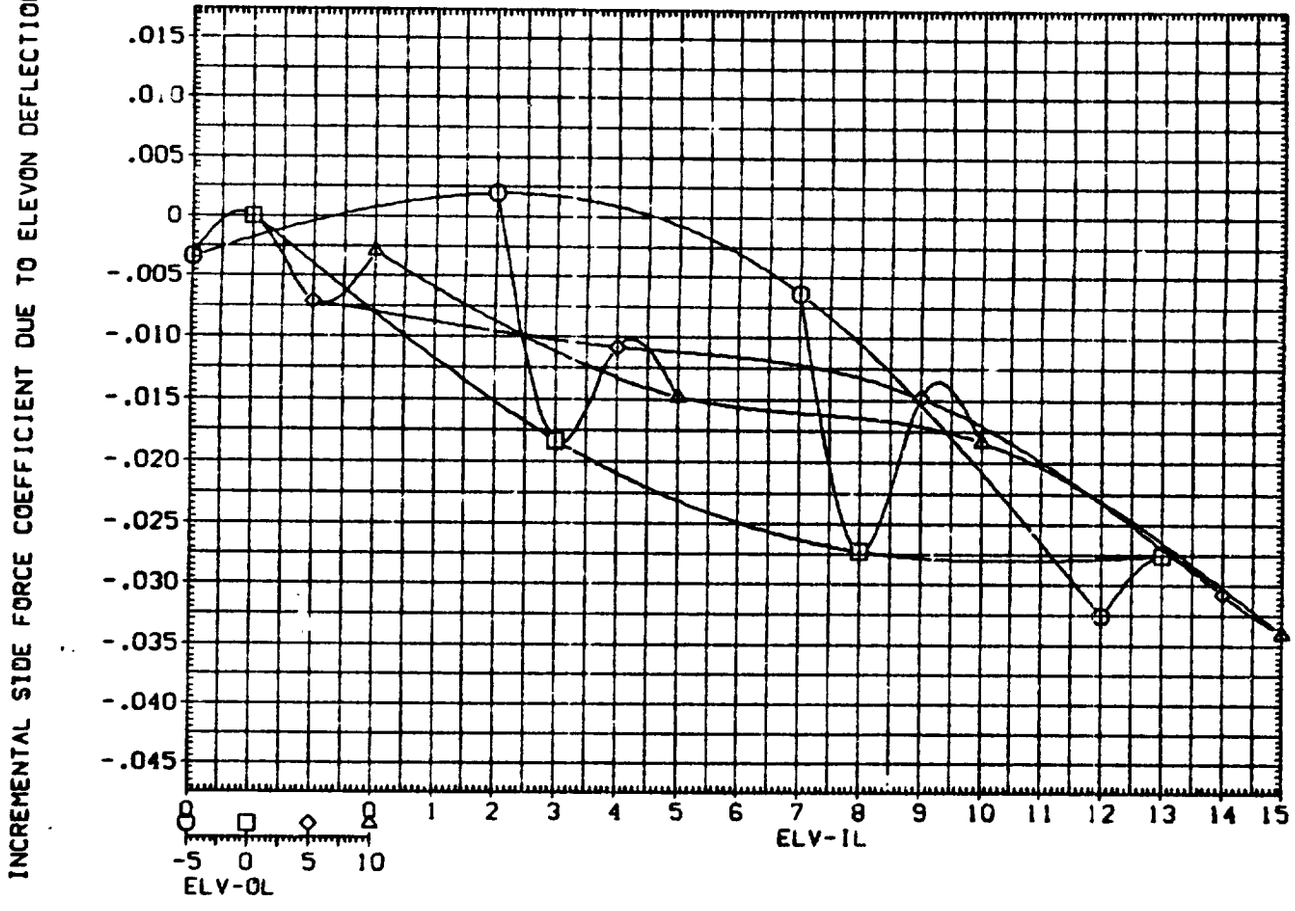
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-10.0(BINBSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

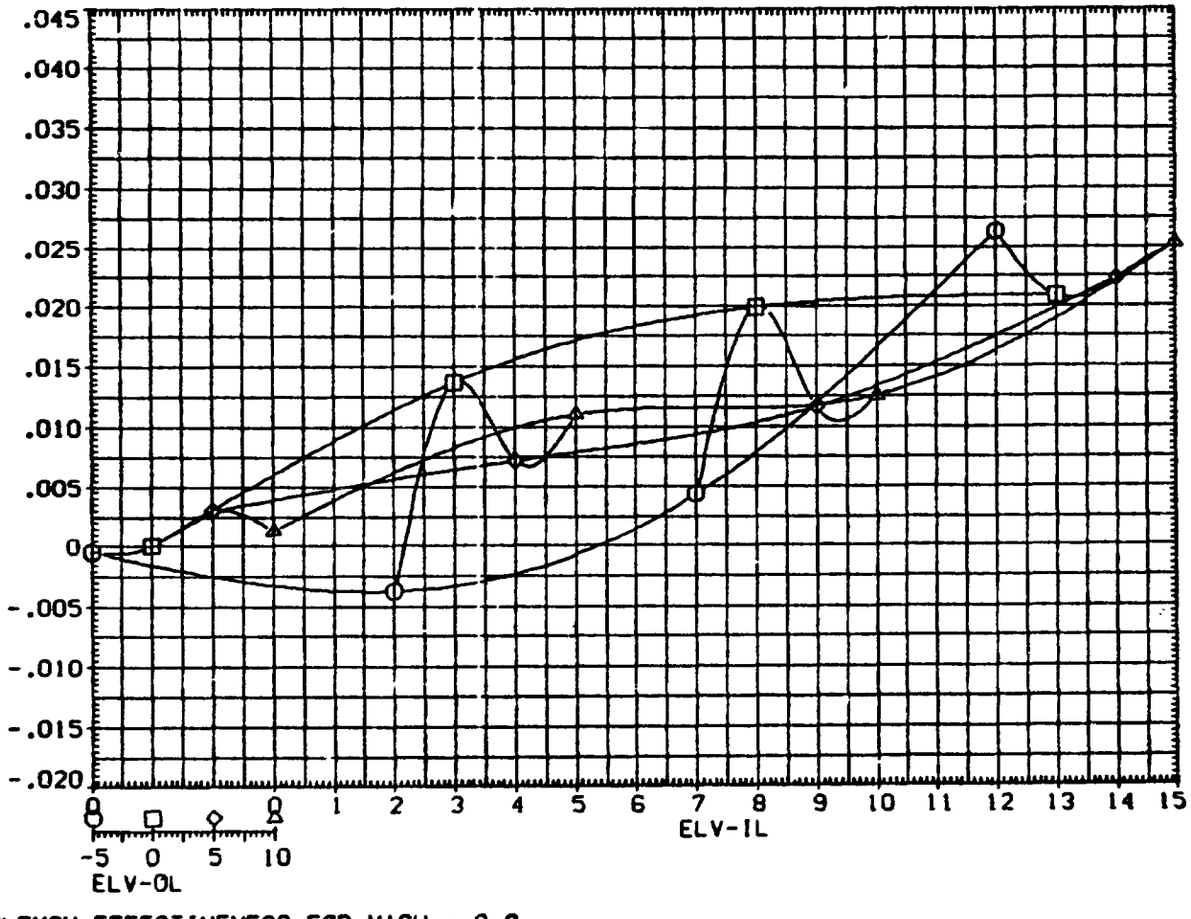
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-10.0(BINBSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

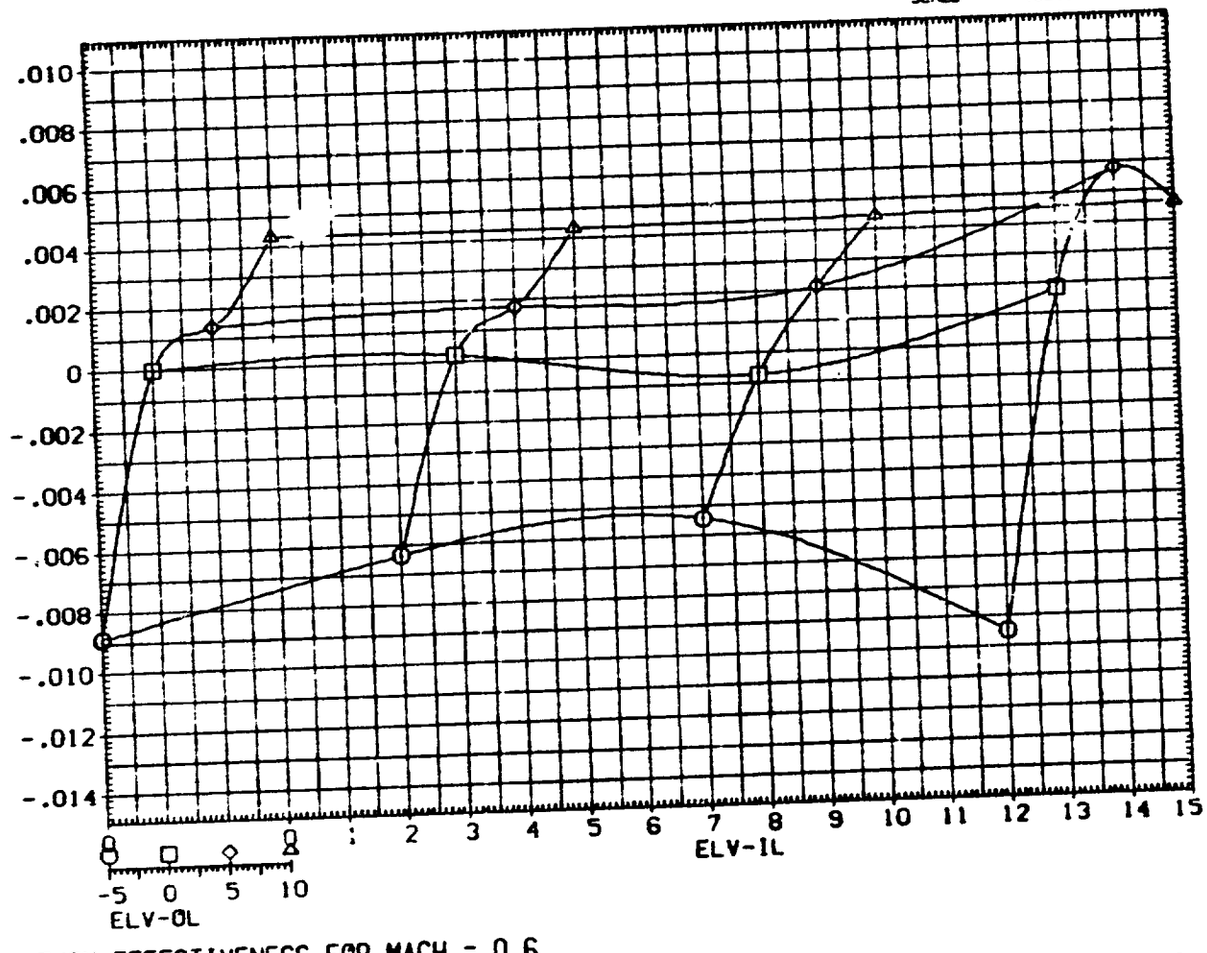
MSFC TWT 622 (1A125) 74 OTS. M= 0.6. ALPHA=-10.0(BINBSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

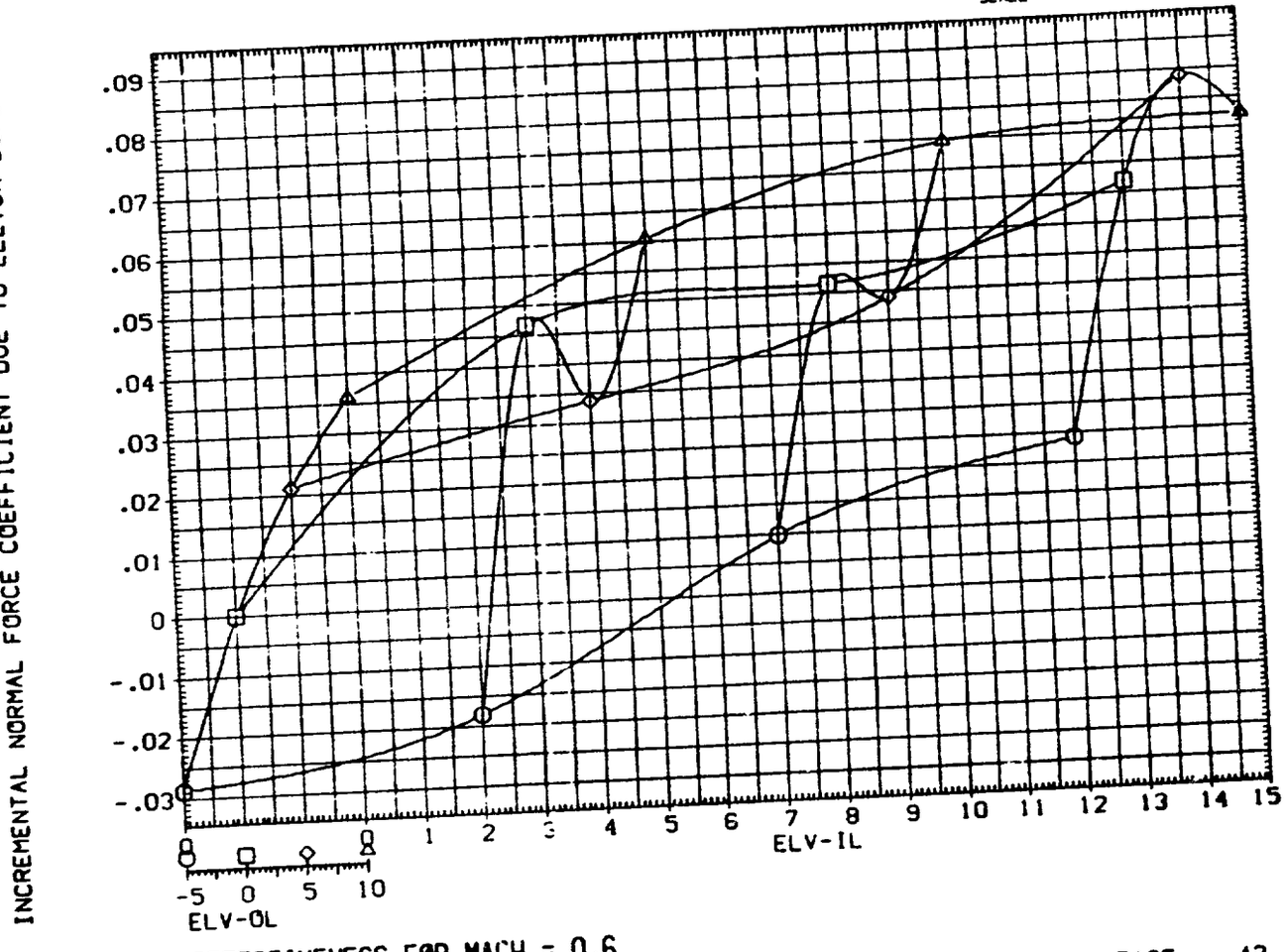
MSFC TWT 622 (IA125) 74 01S, M= 0.6, ALPHA=-8.0 (BINBSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

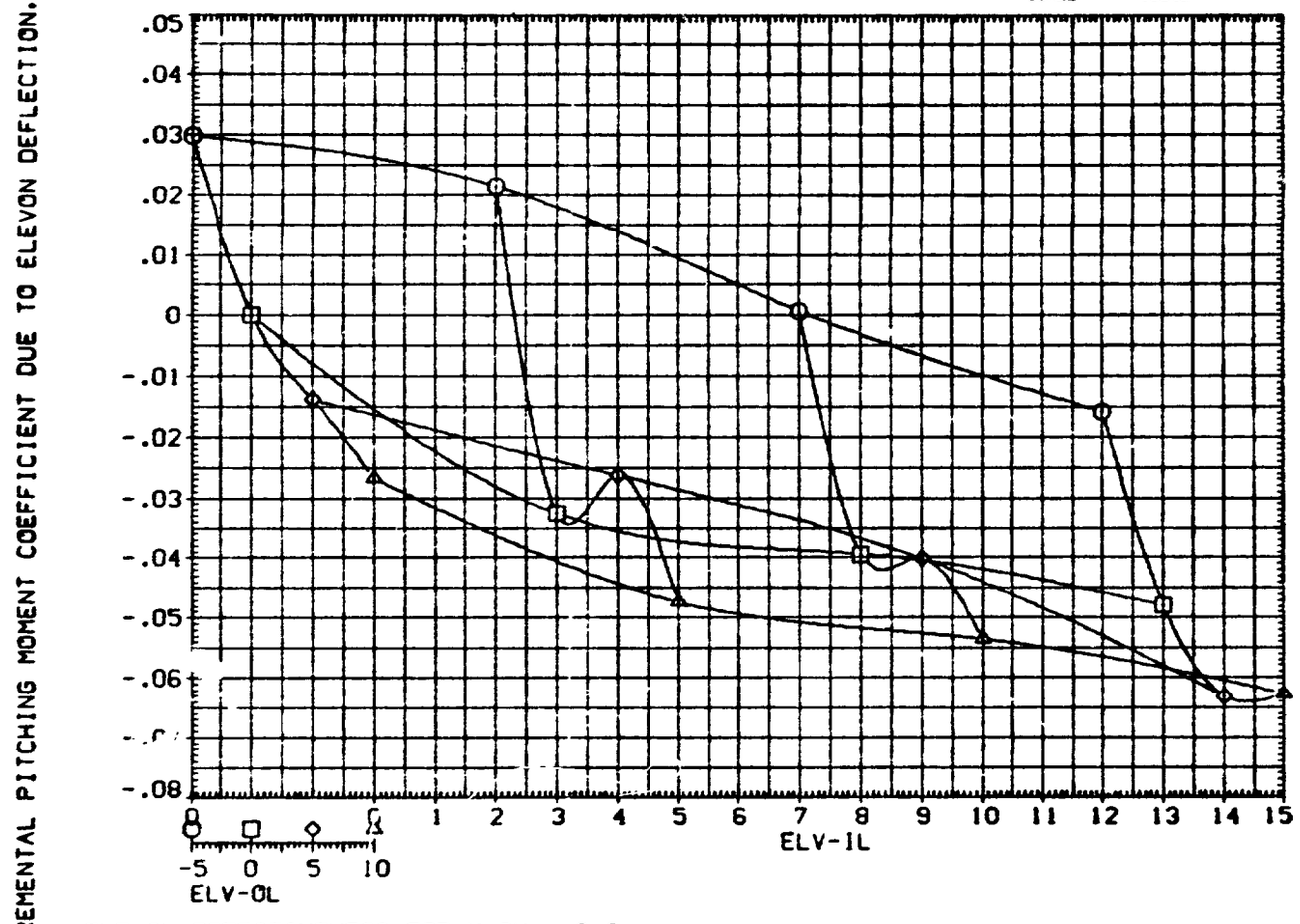
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-8.0 (BINBSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8 000
MACH	.600	ELV-IR	000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690 0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

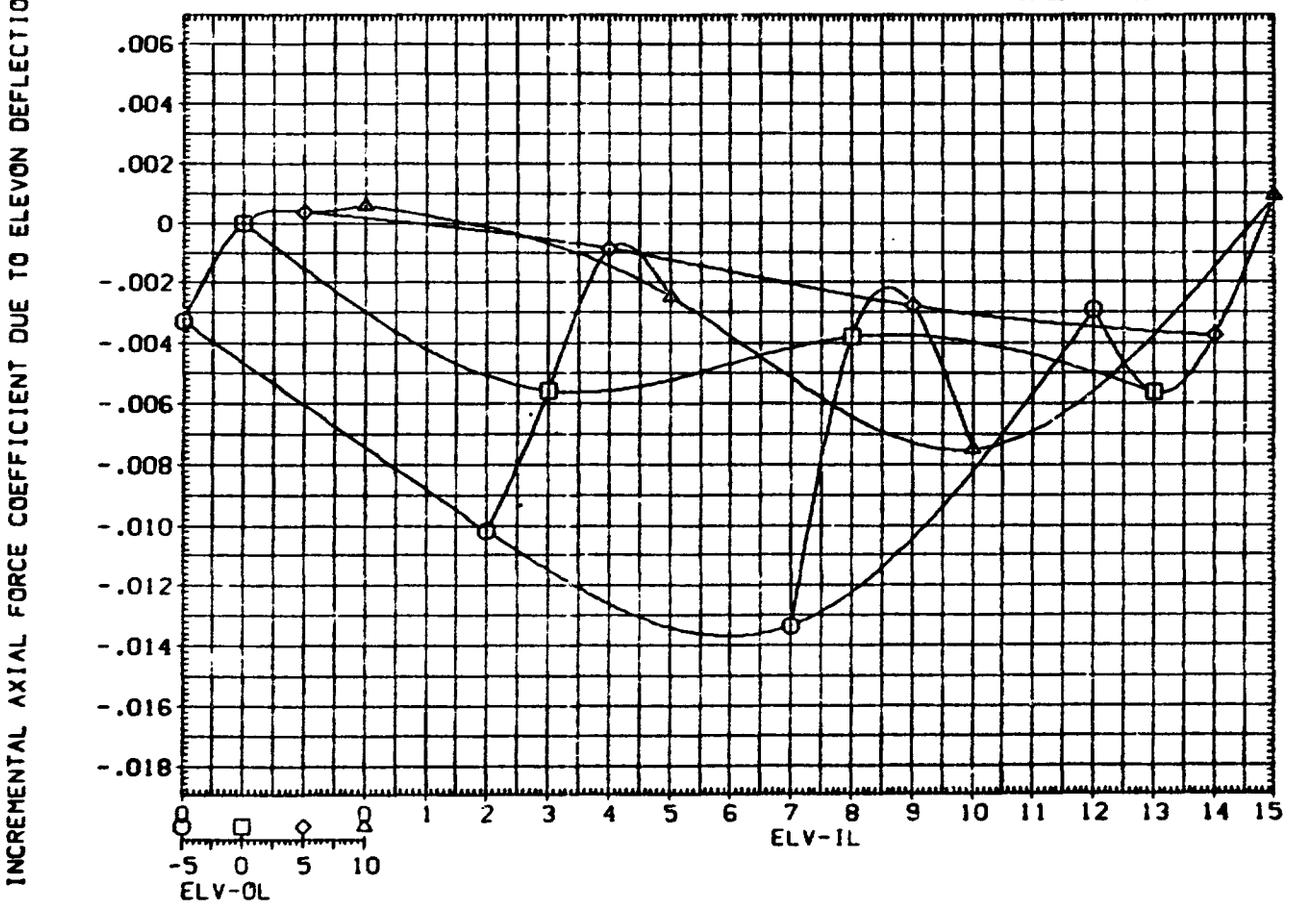
MSFC TWT 622 (IA125) 74 OTS. M= 0.6, ALPHA=-8.0 (B1NBSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.600	ELV-IR	.010
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

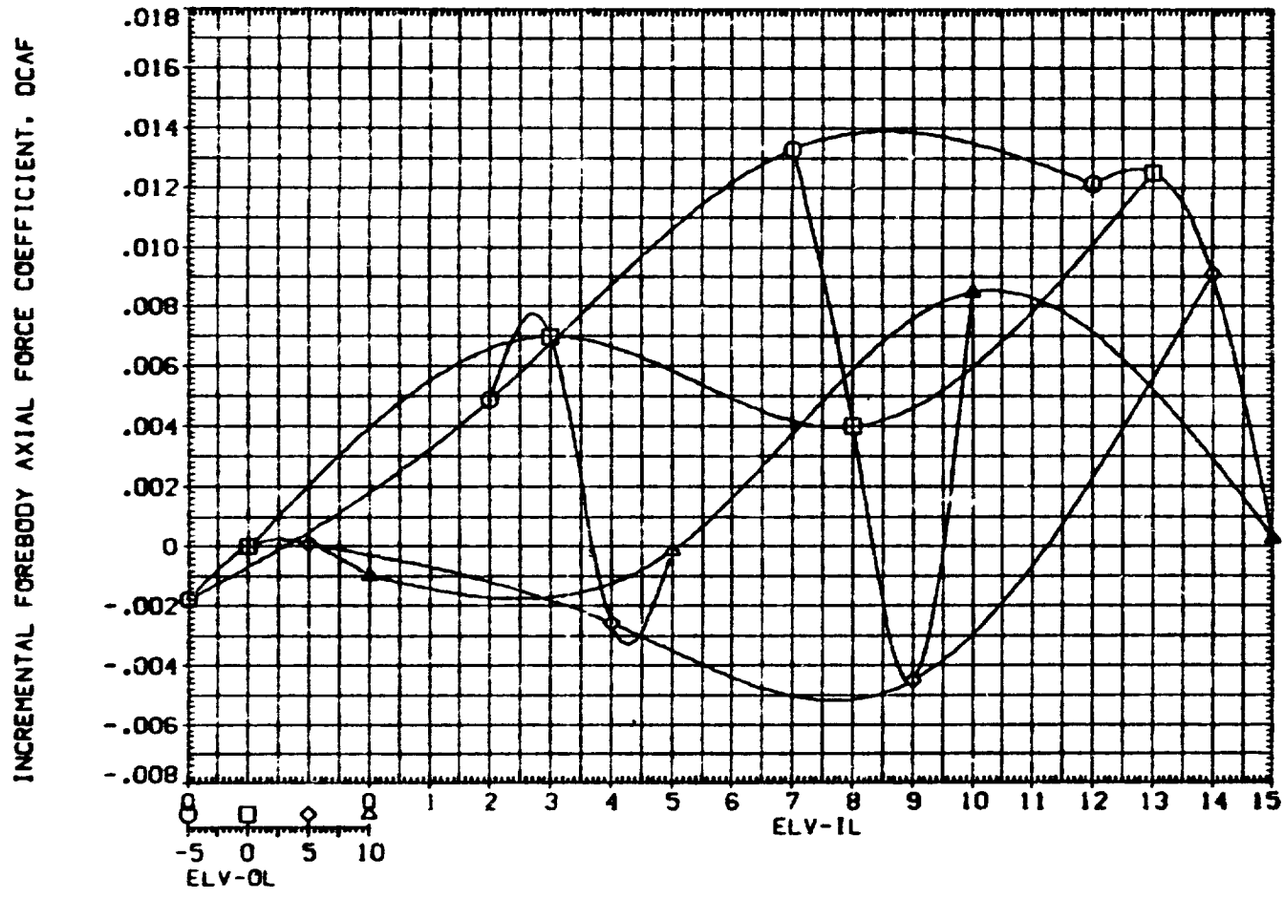
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-8.0 (BINBSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

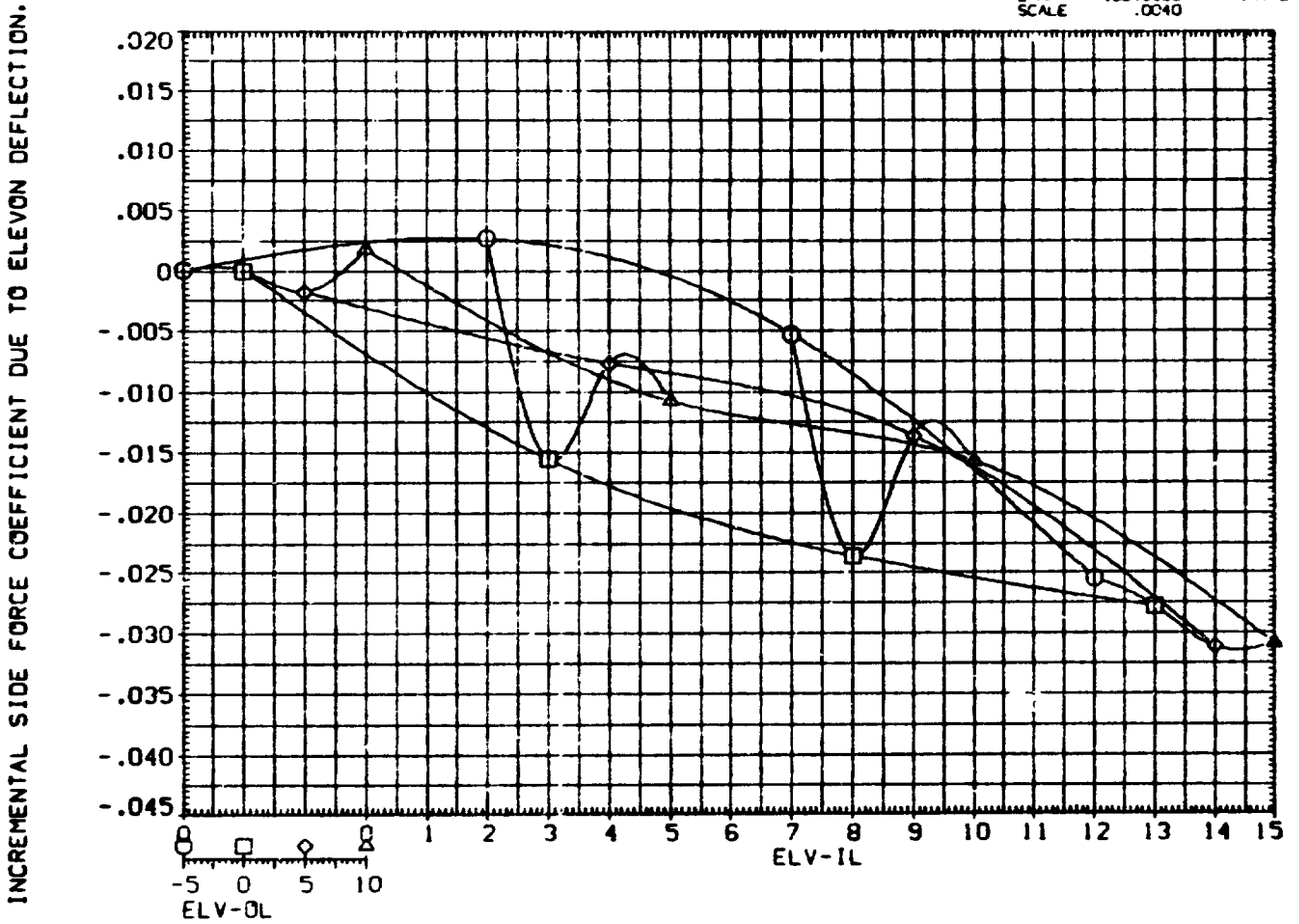
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-8.0 (B1N8SB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

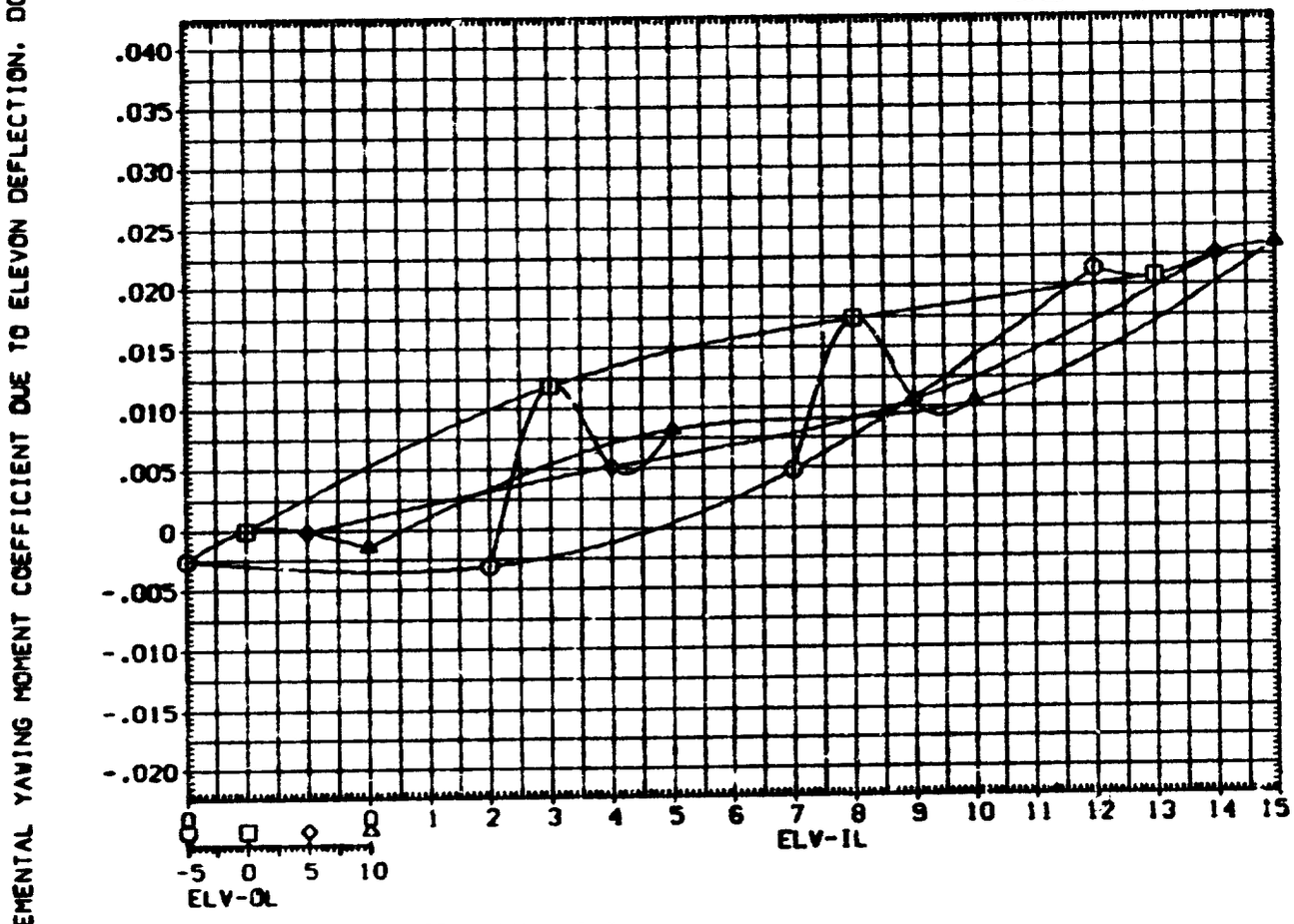
MSFC 1WT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-8.0 (BINBSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2880.0000	SQ. FT
LREF	1250.3000	INCHES
BREF	1250.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

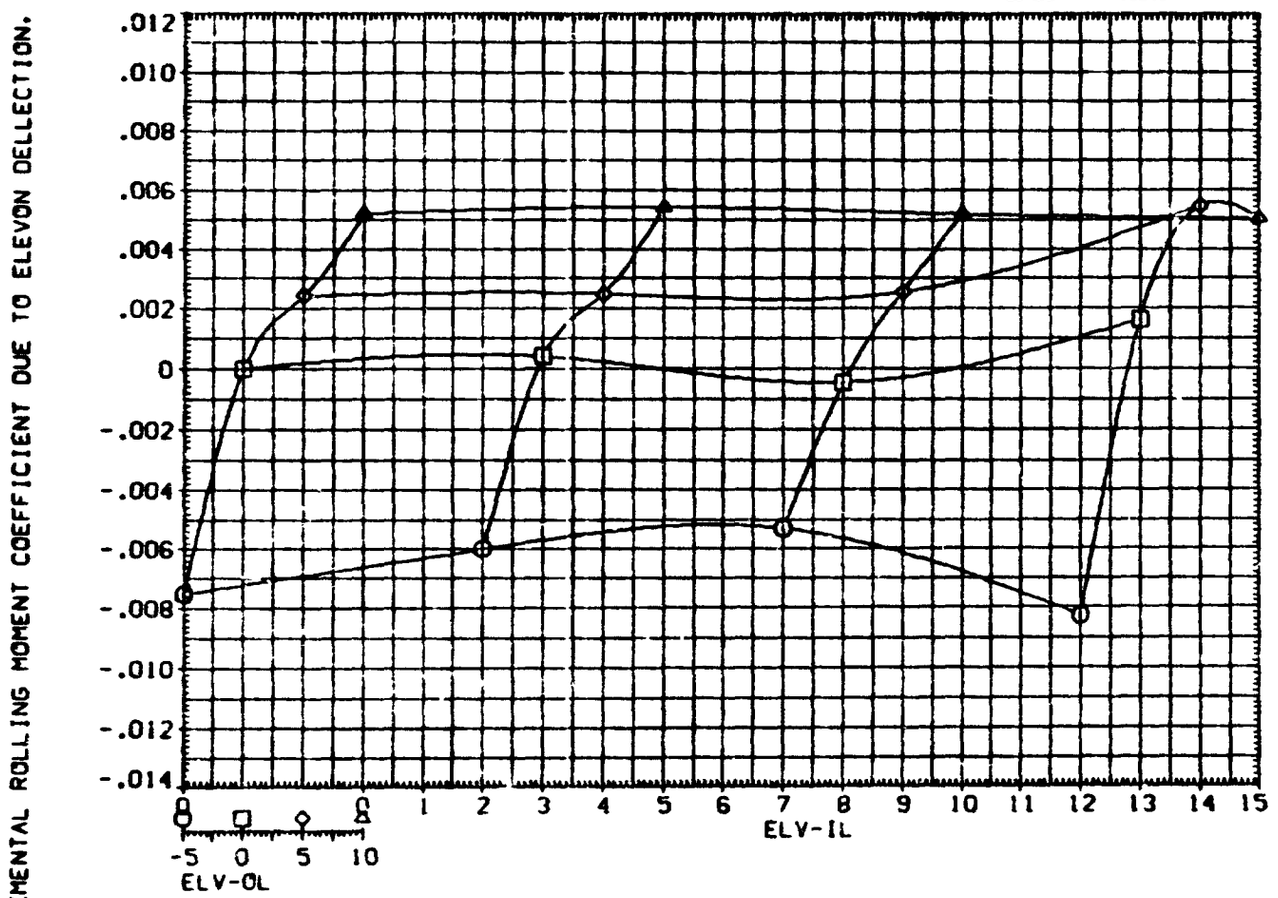
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-8.0 (BINBSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

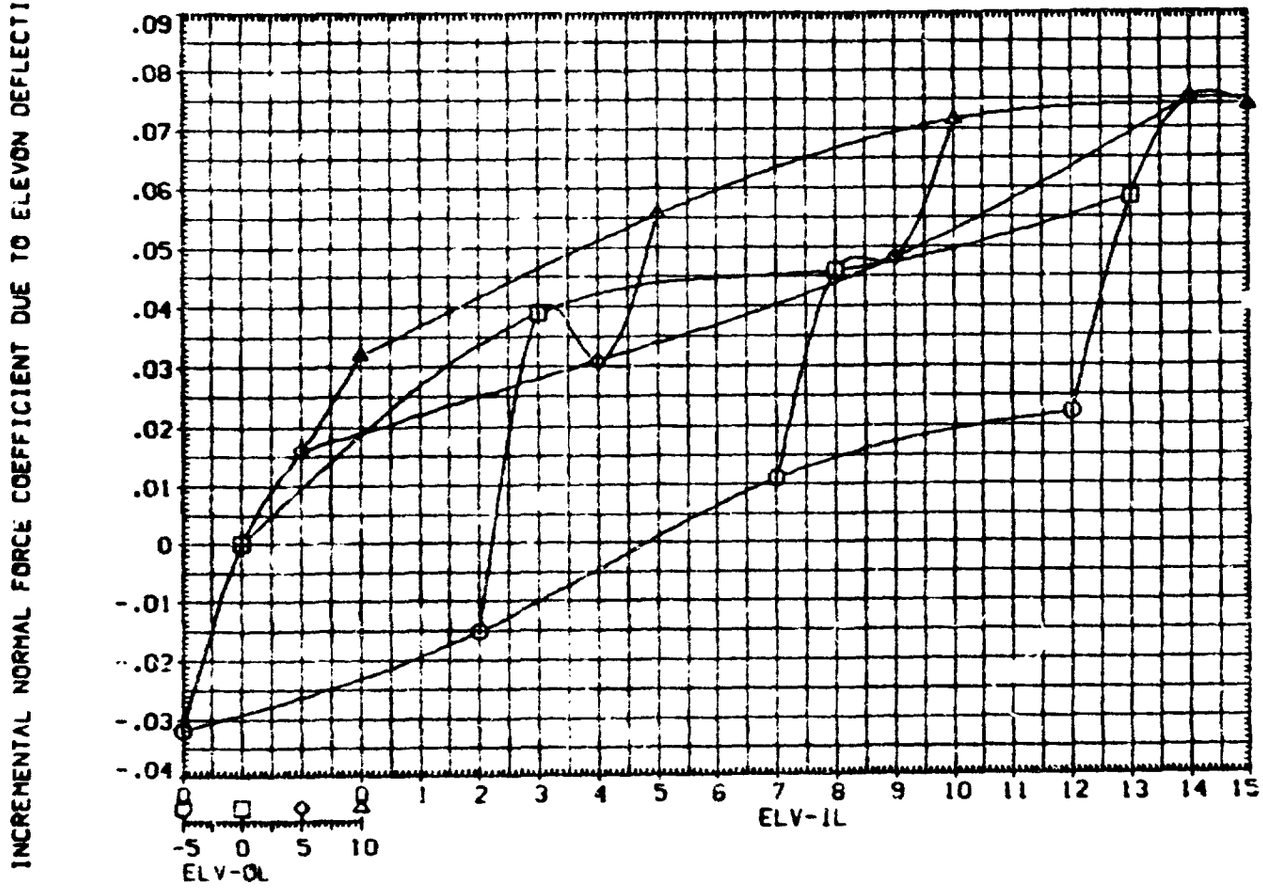
MSFC TWT 622 (1A125) 74 OTS. M= 0.6. ALPHA=-6.0 (BINBSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2650.0000	SQ. FT
LREF	1250.3000	INCHES
BREF	1250.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

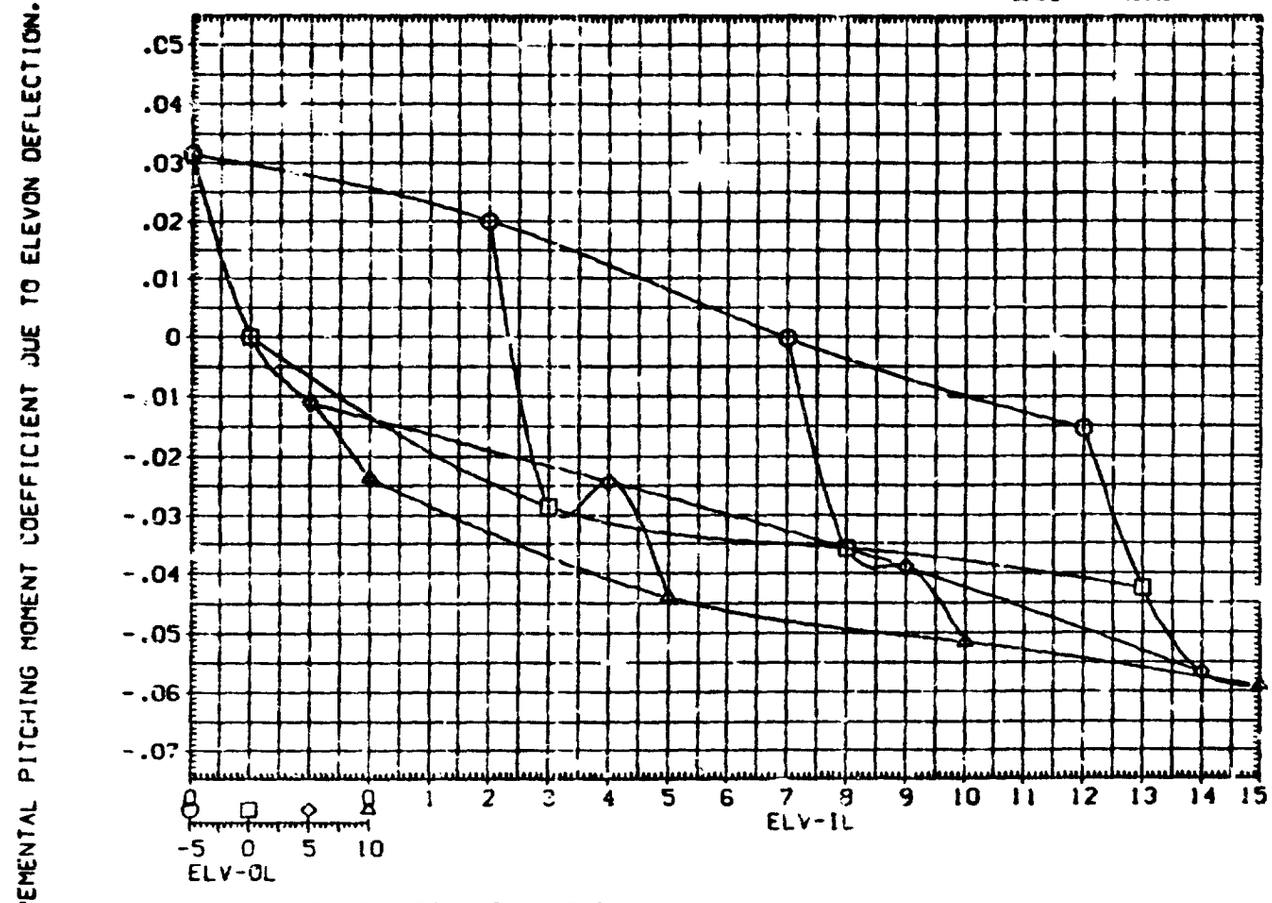
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-6.0 (BINBSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1250.3000	INCHES
BREF	1250.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

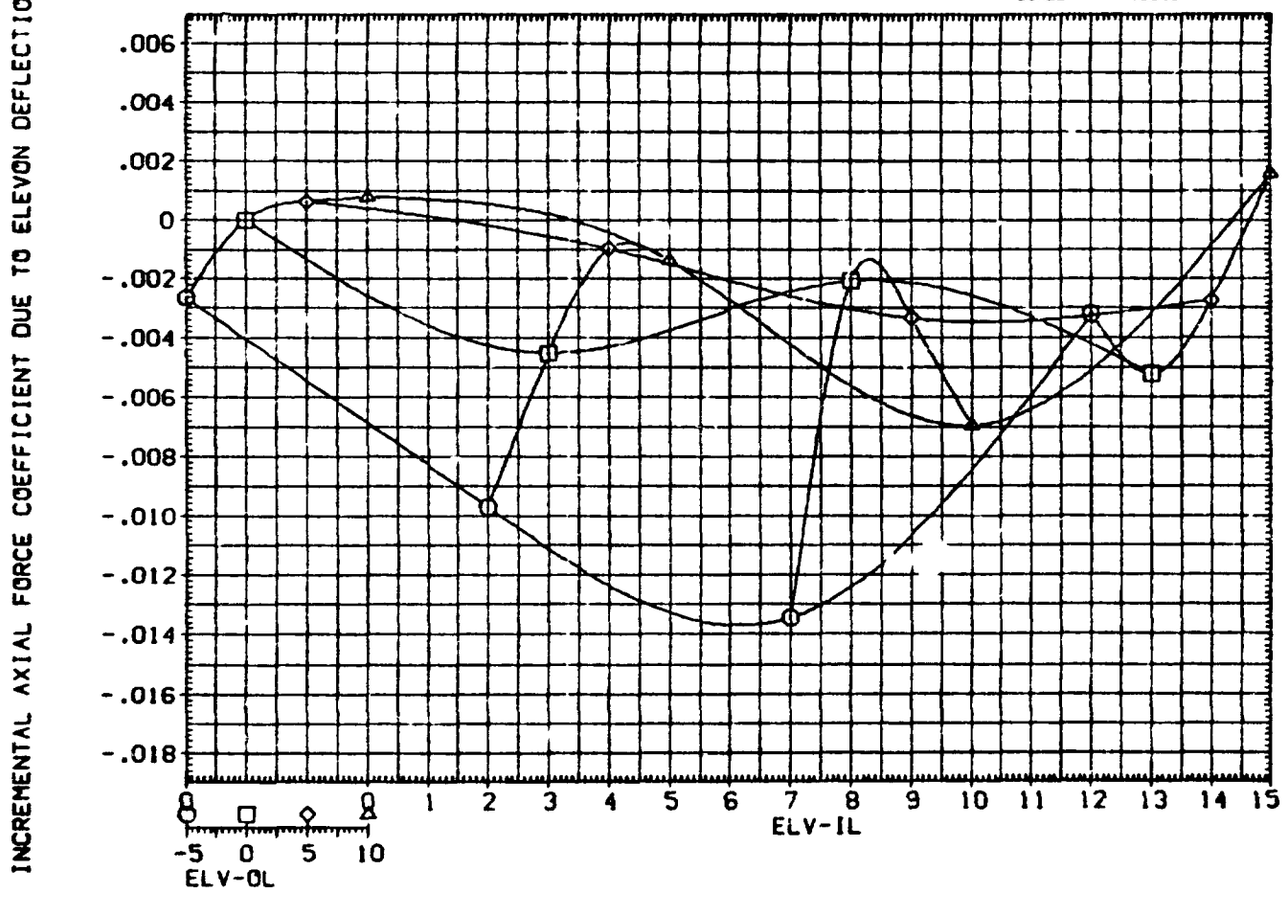
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-5.0 (B1NBSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

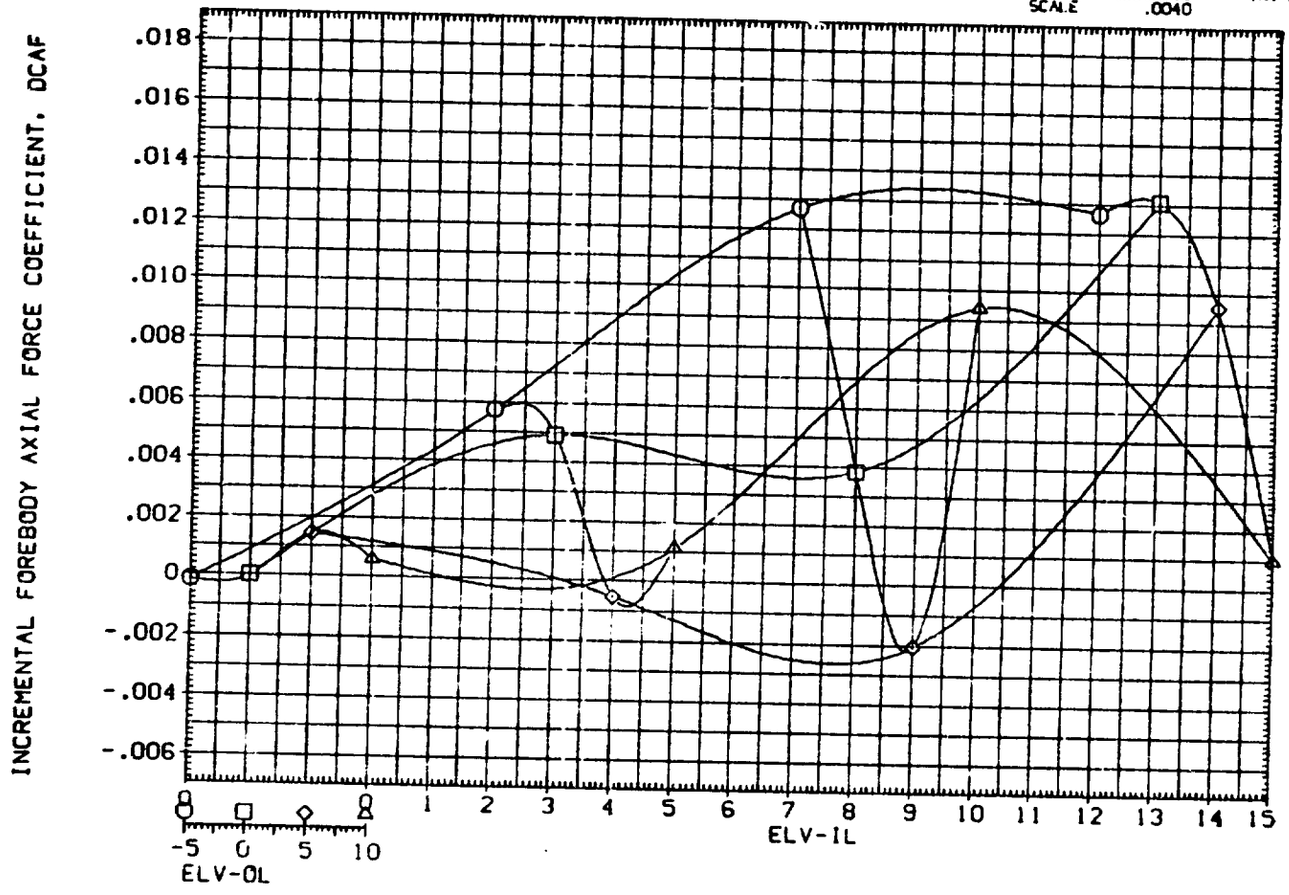
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-6.0 (BINBSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

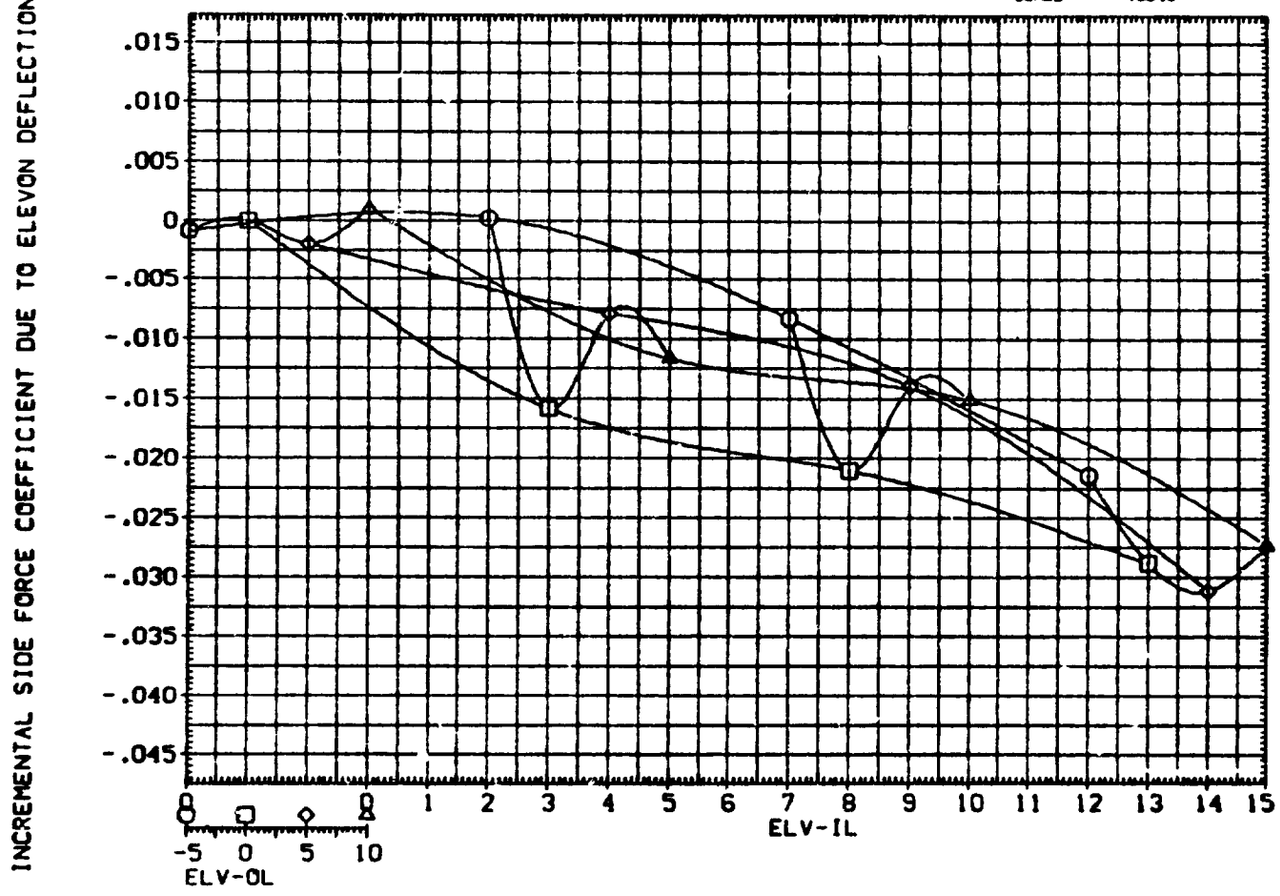
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA=-6.0 (BINBSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1297.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

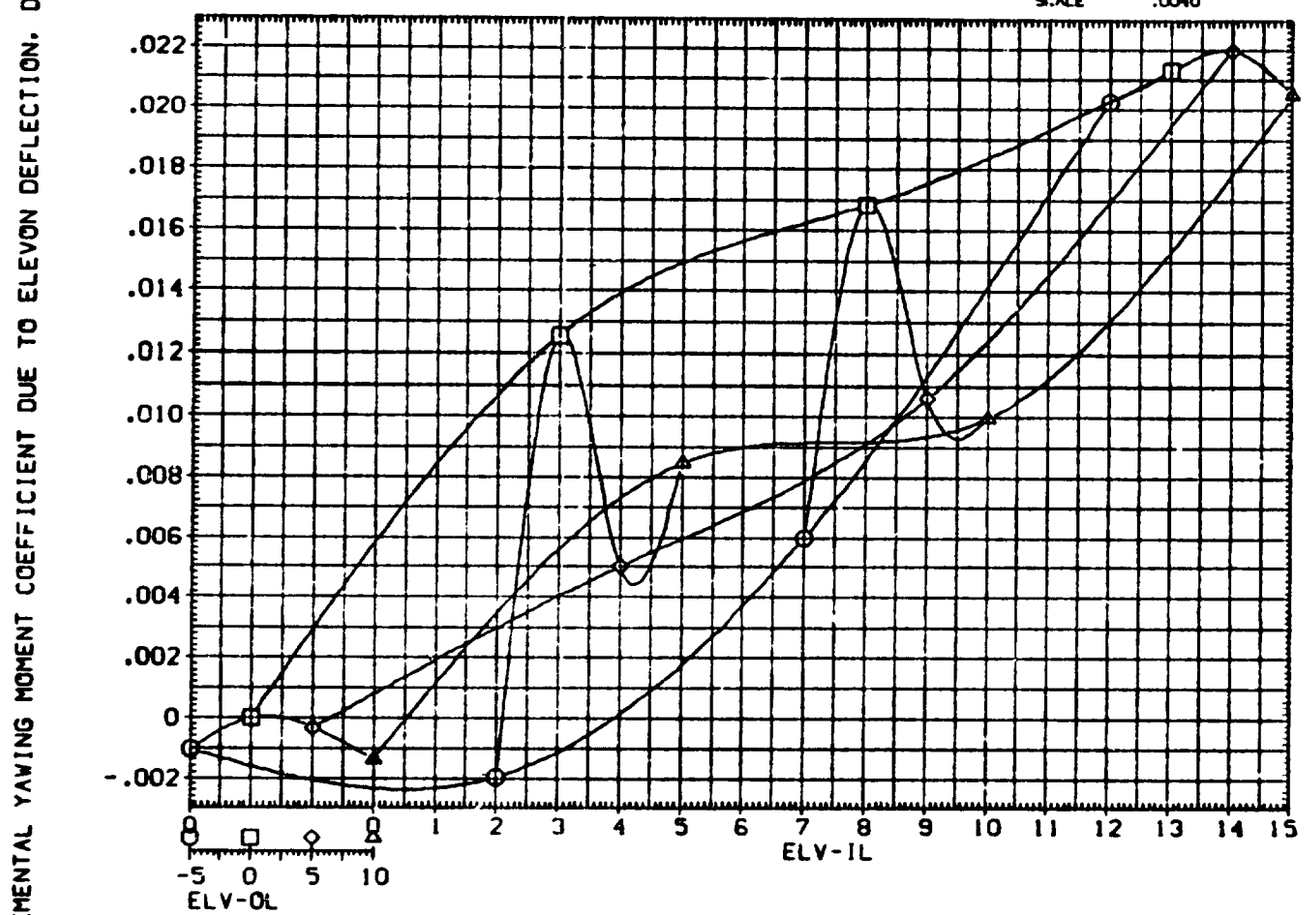
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA=-6.0 (B1NBSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

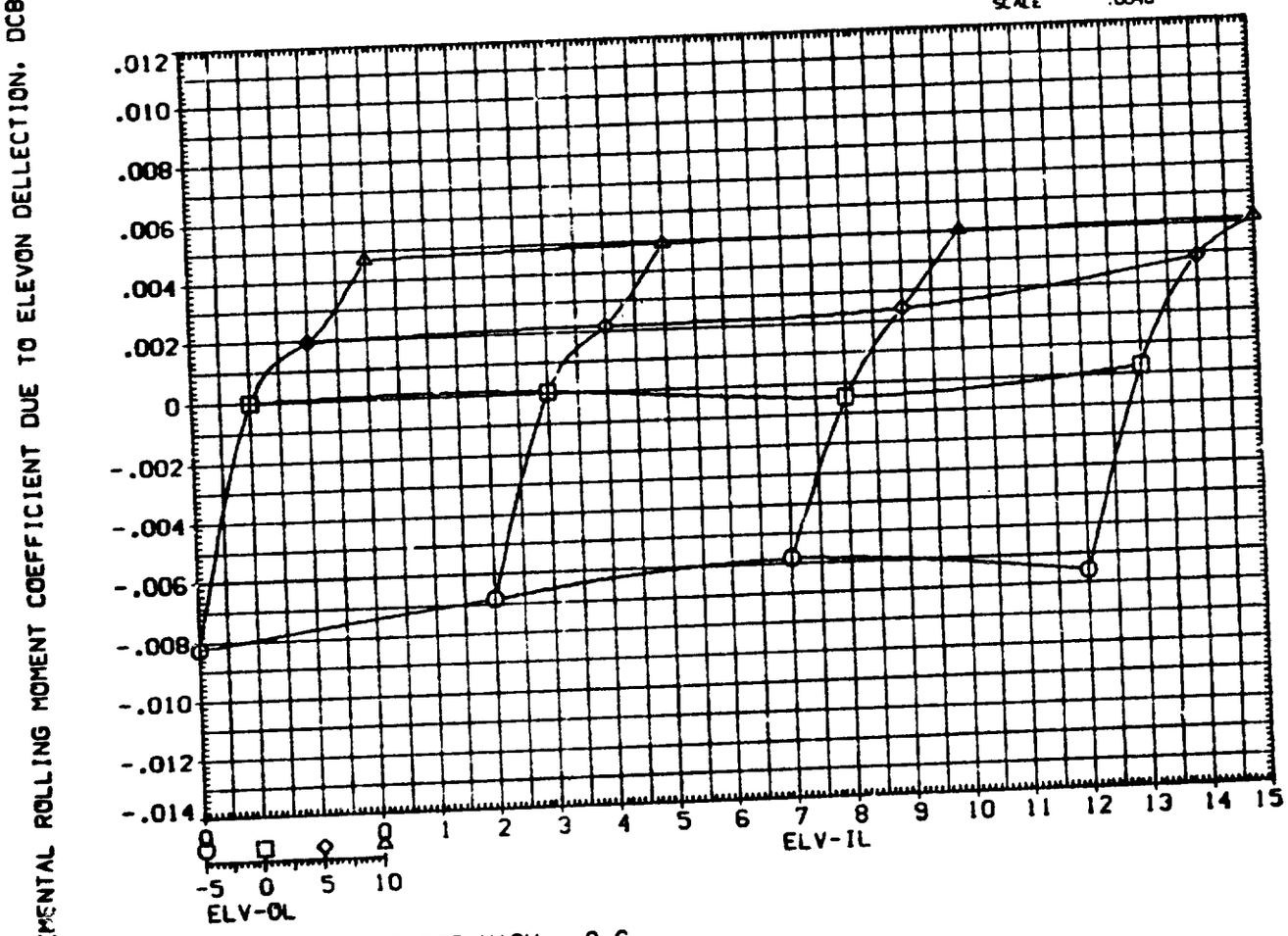
MSFC TWT 622 (!A125) 74 OTS, M= 0.6, ALPHA=-6.0 (BINBSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

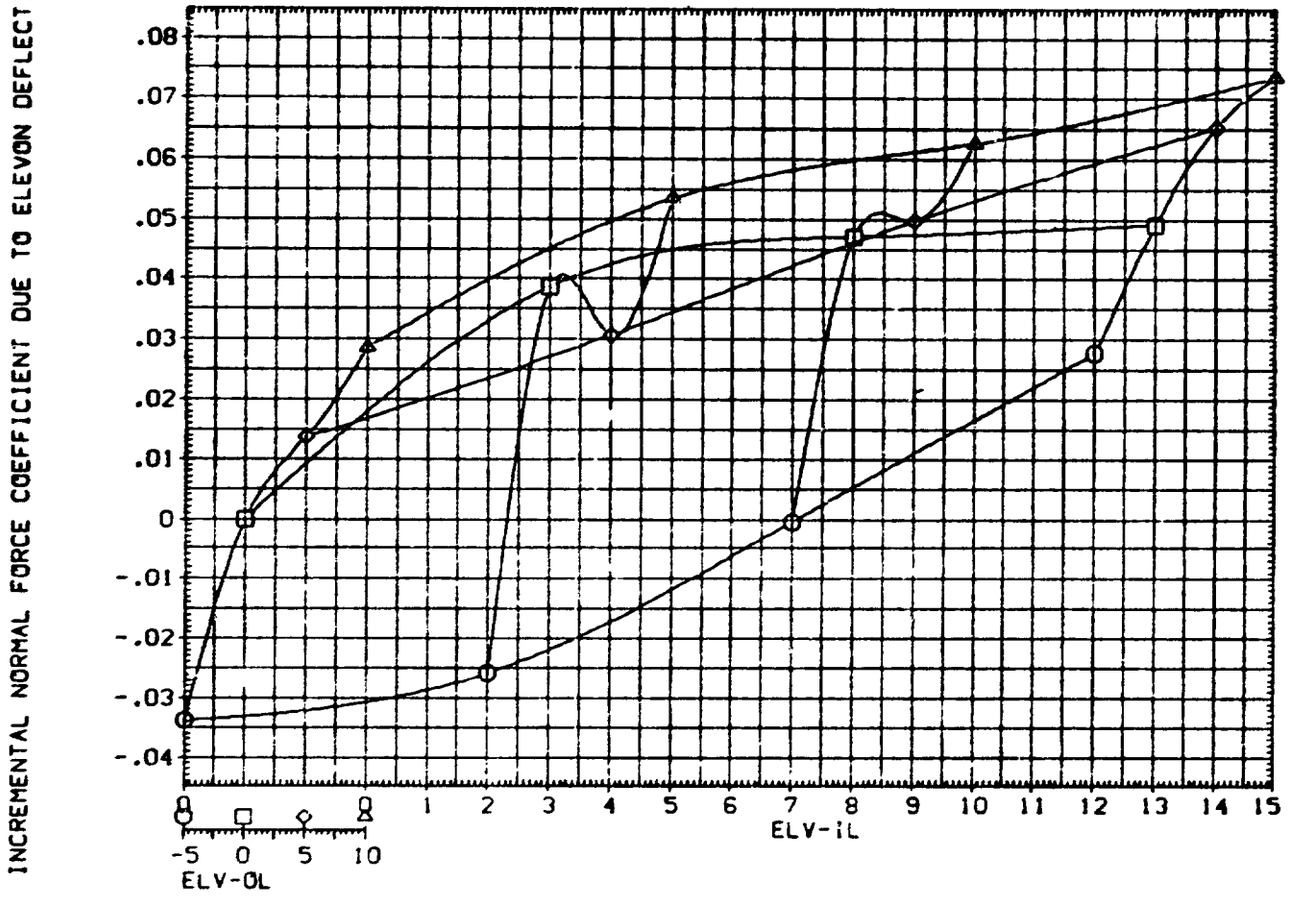
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-4.0 (BINBSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

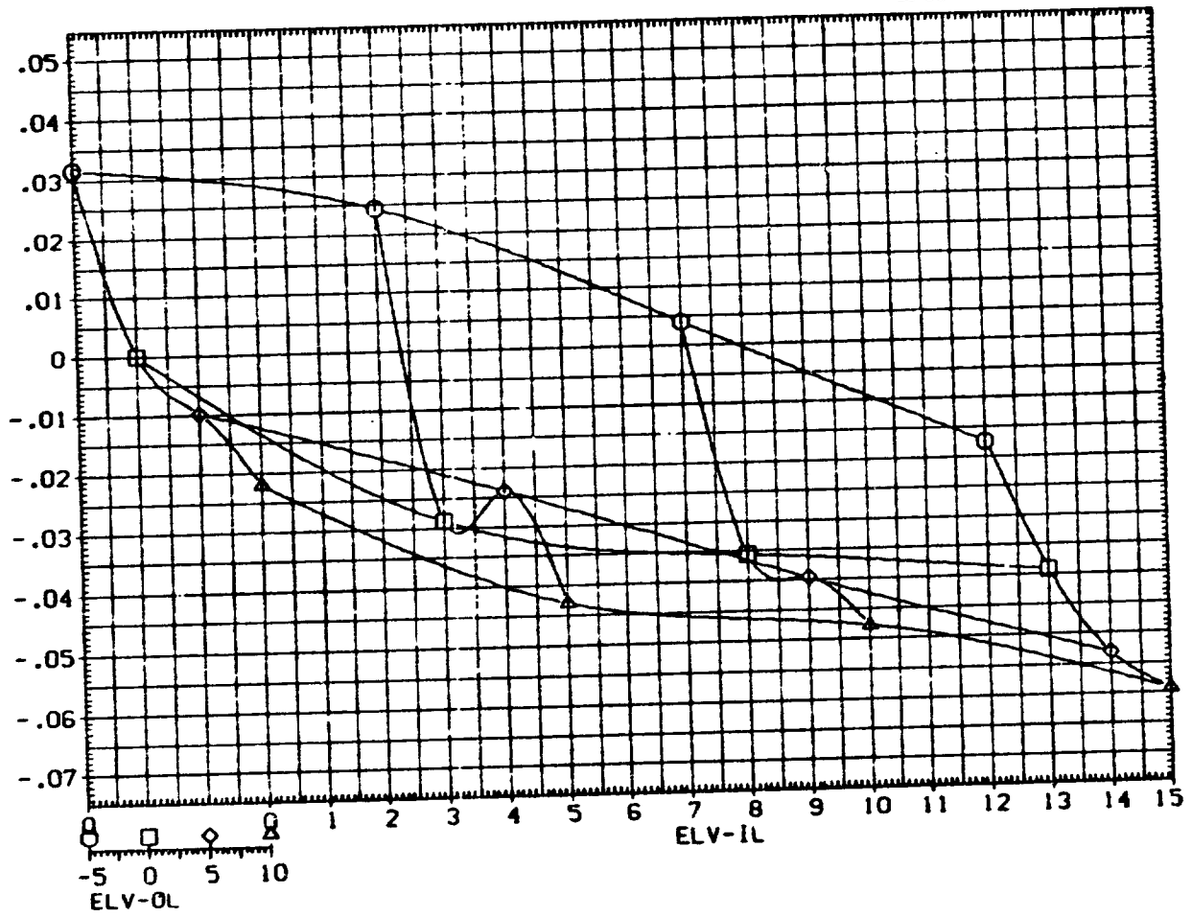
MSFC TWT 622 (IA125) 74 OTS. M= 0.6, ALPHA=-4.0 (BINBSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

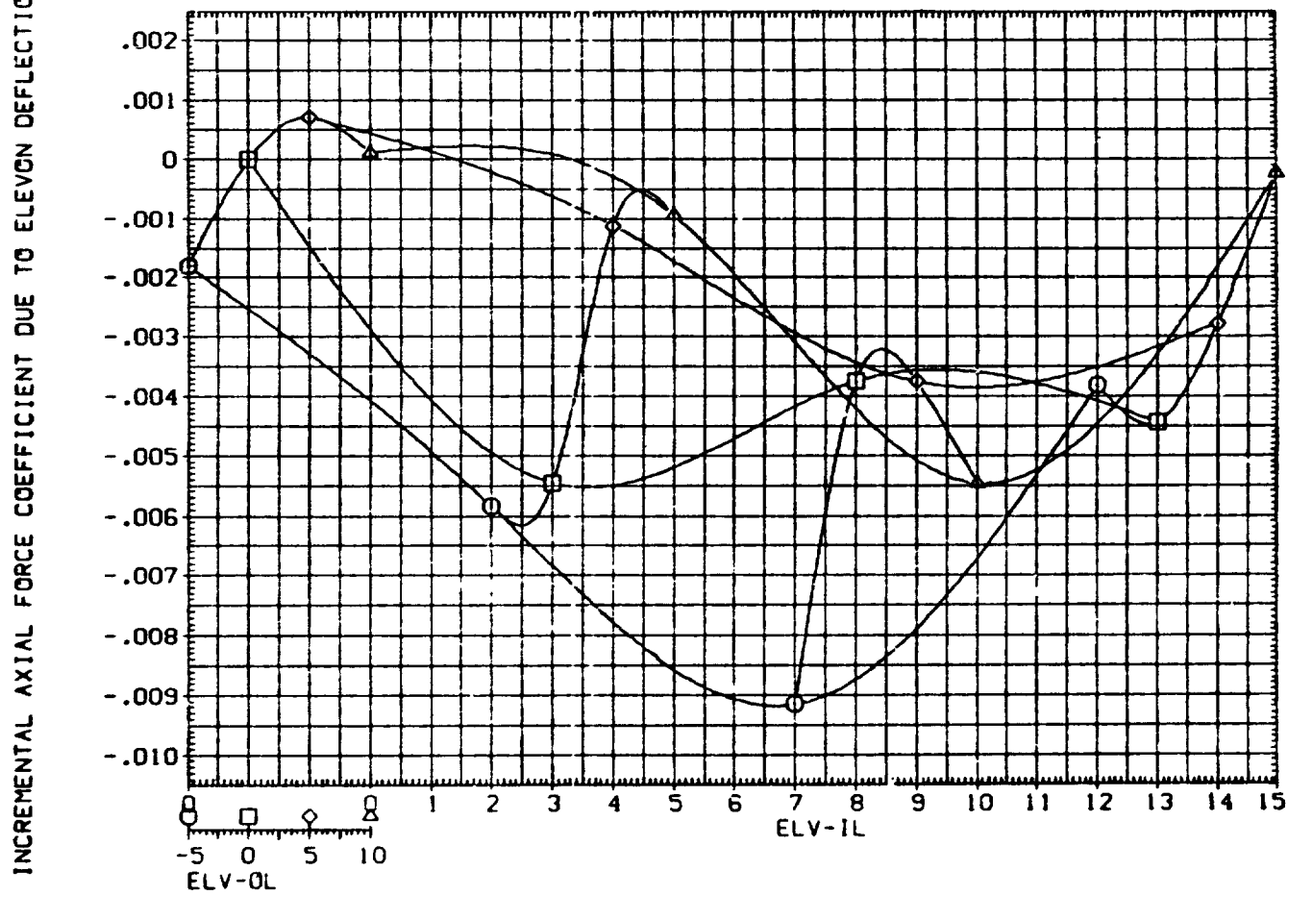
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-4.0 (B1N8SD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

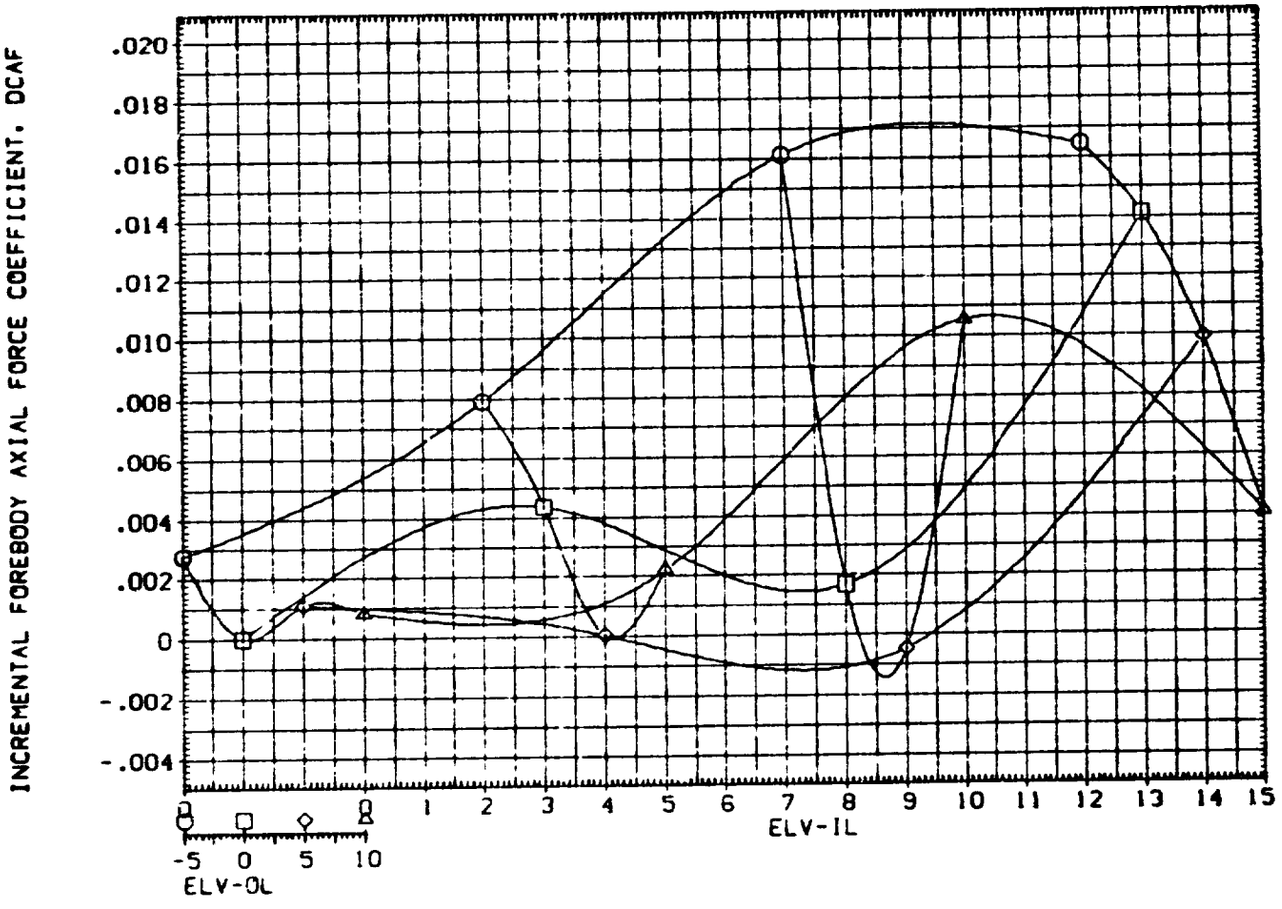
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-4.0 (B1NBSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.600	ELV-IR	.300
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

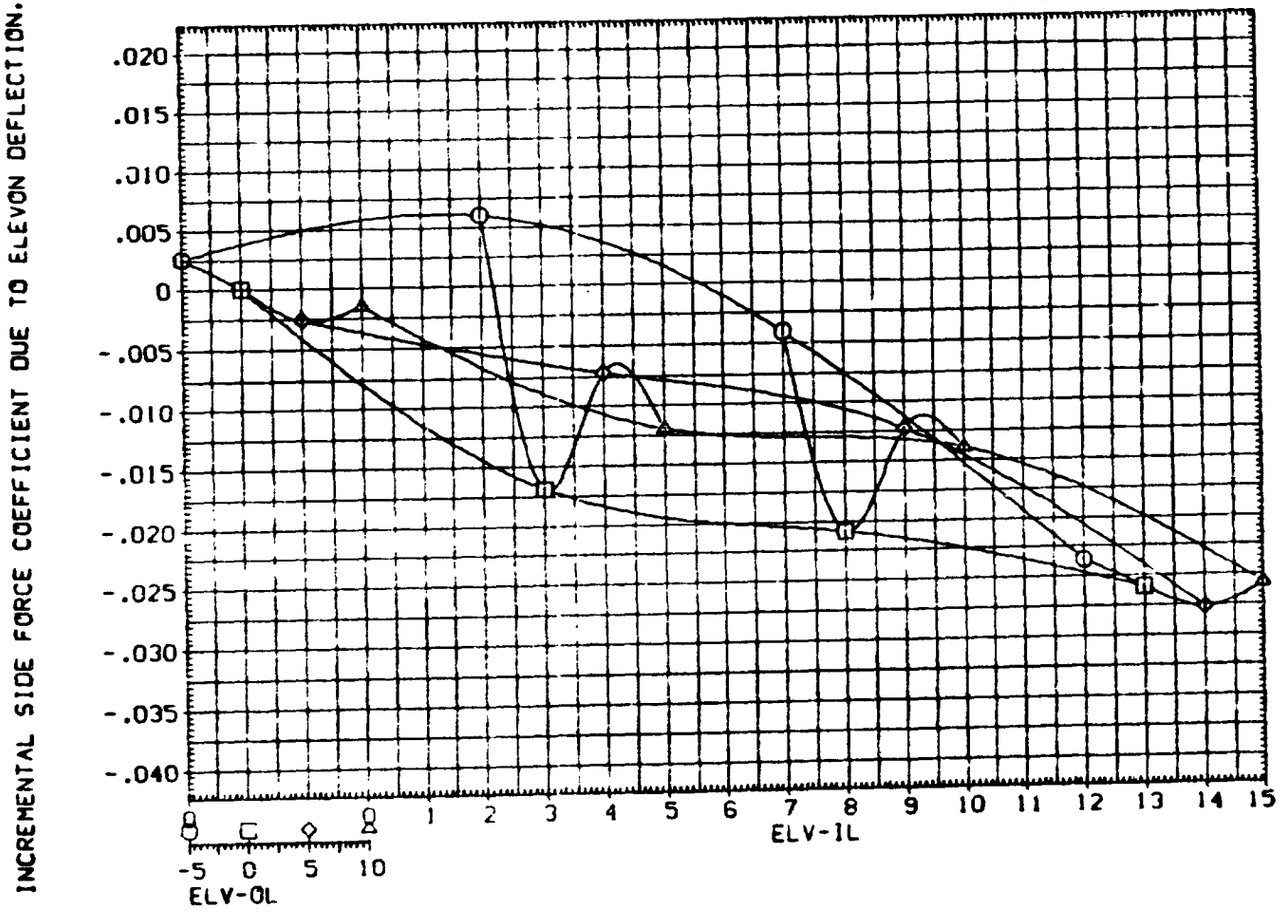
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA=-4.0 (BINBSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

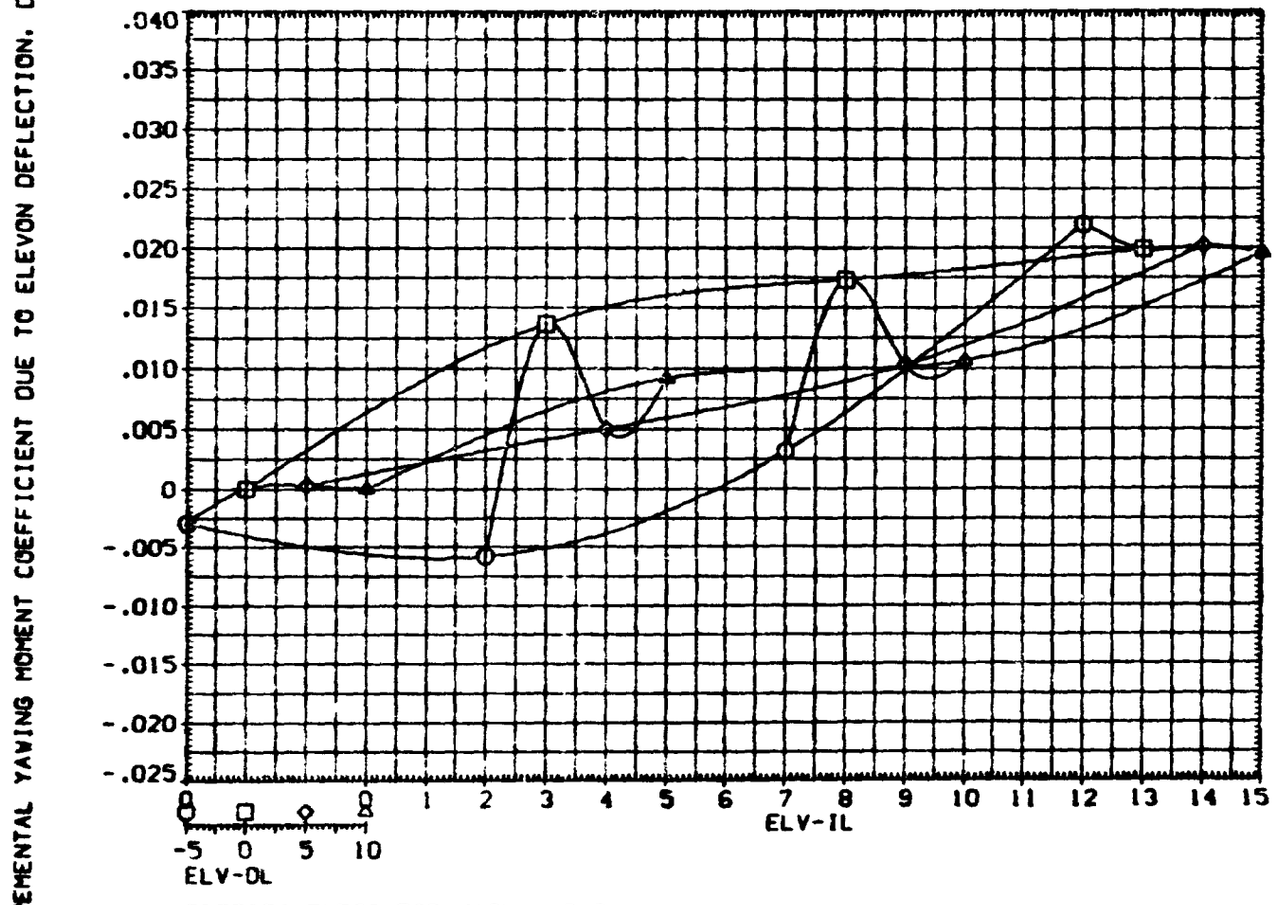
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-4.0 (BINBSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

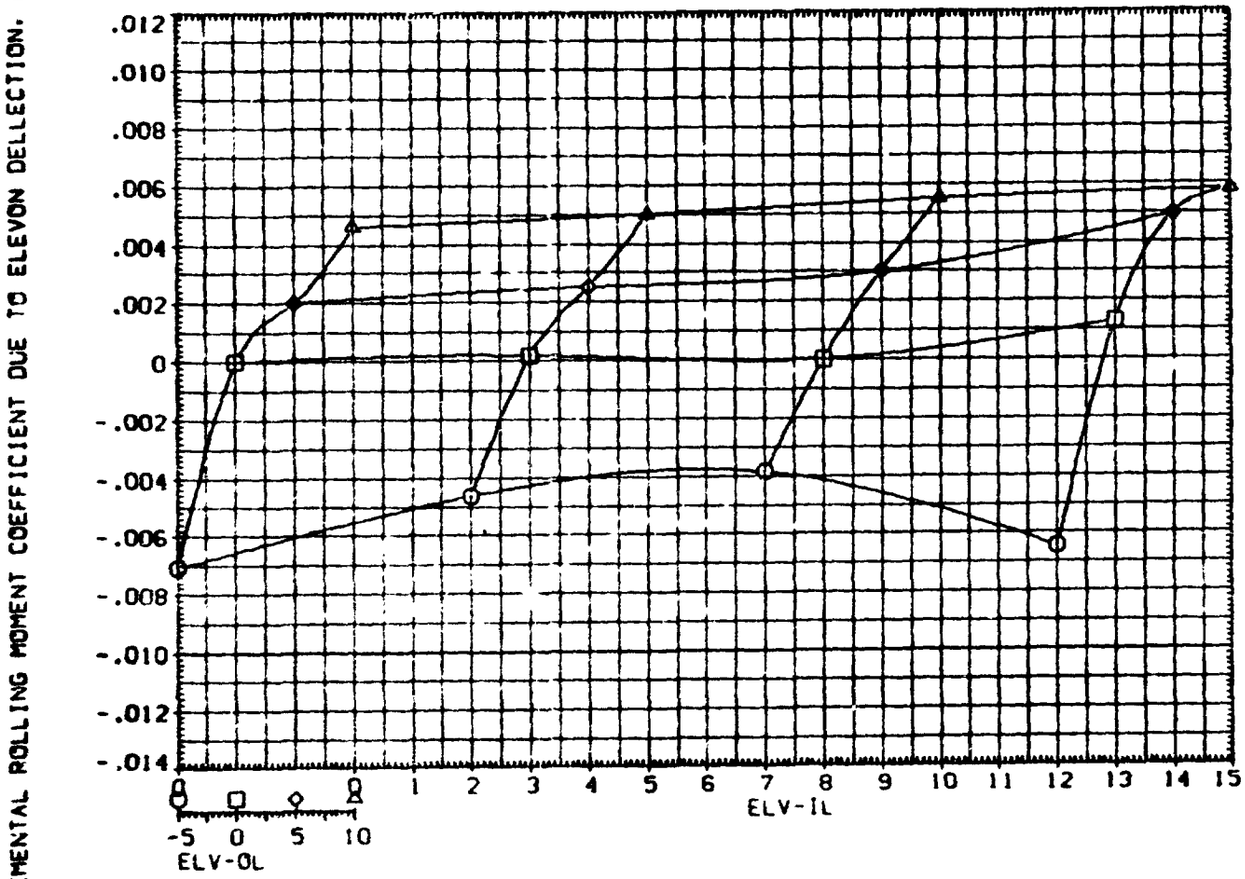
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-4.0 (BINBSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

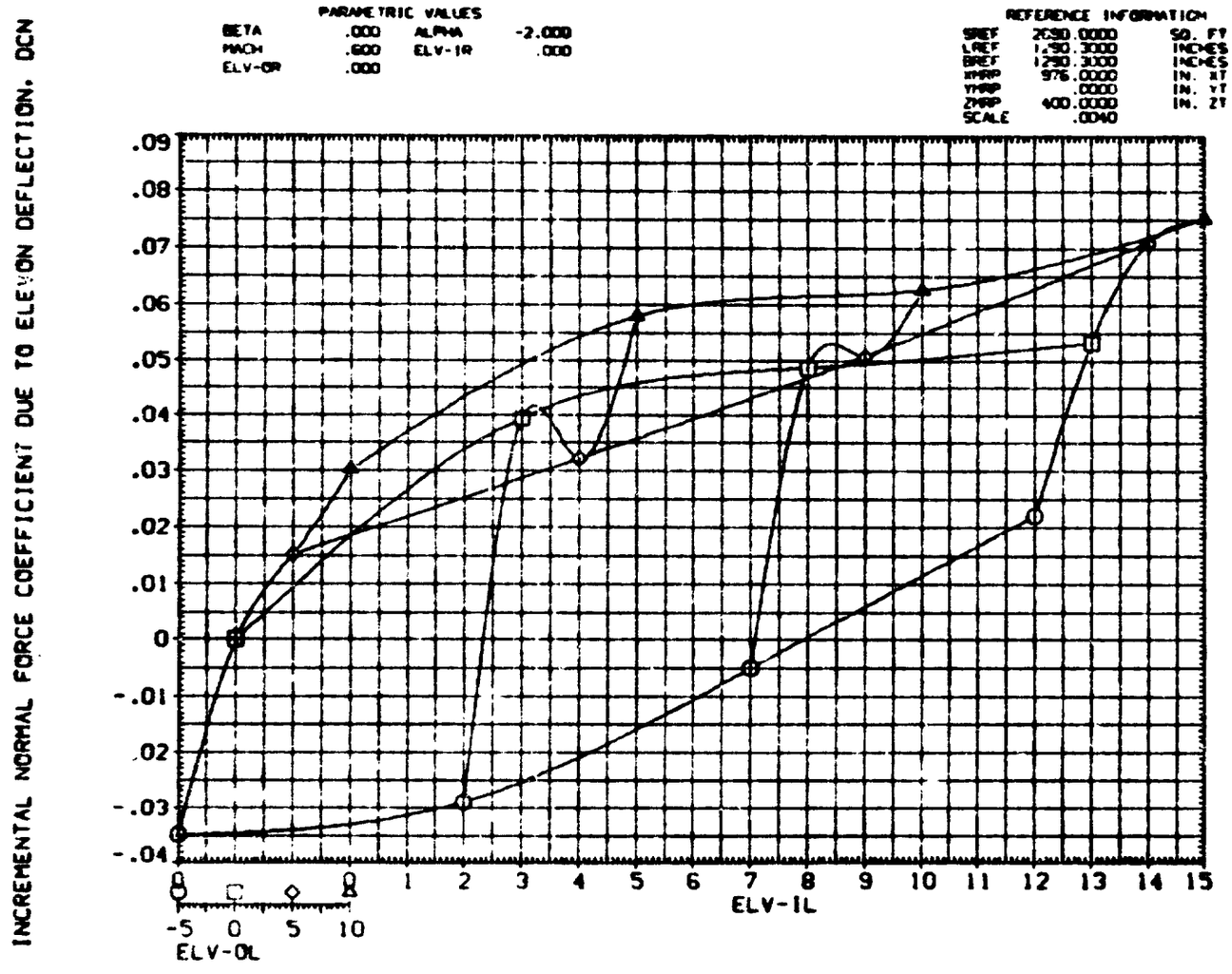
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-2.0 (BINBSE)



ELEVON EFFECTIVENESS FOR MACH = 0.6

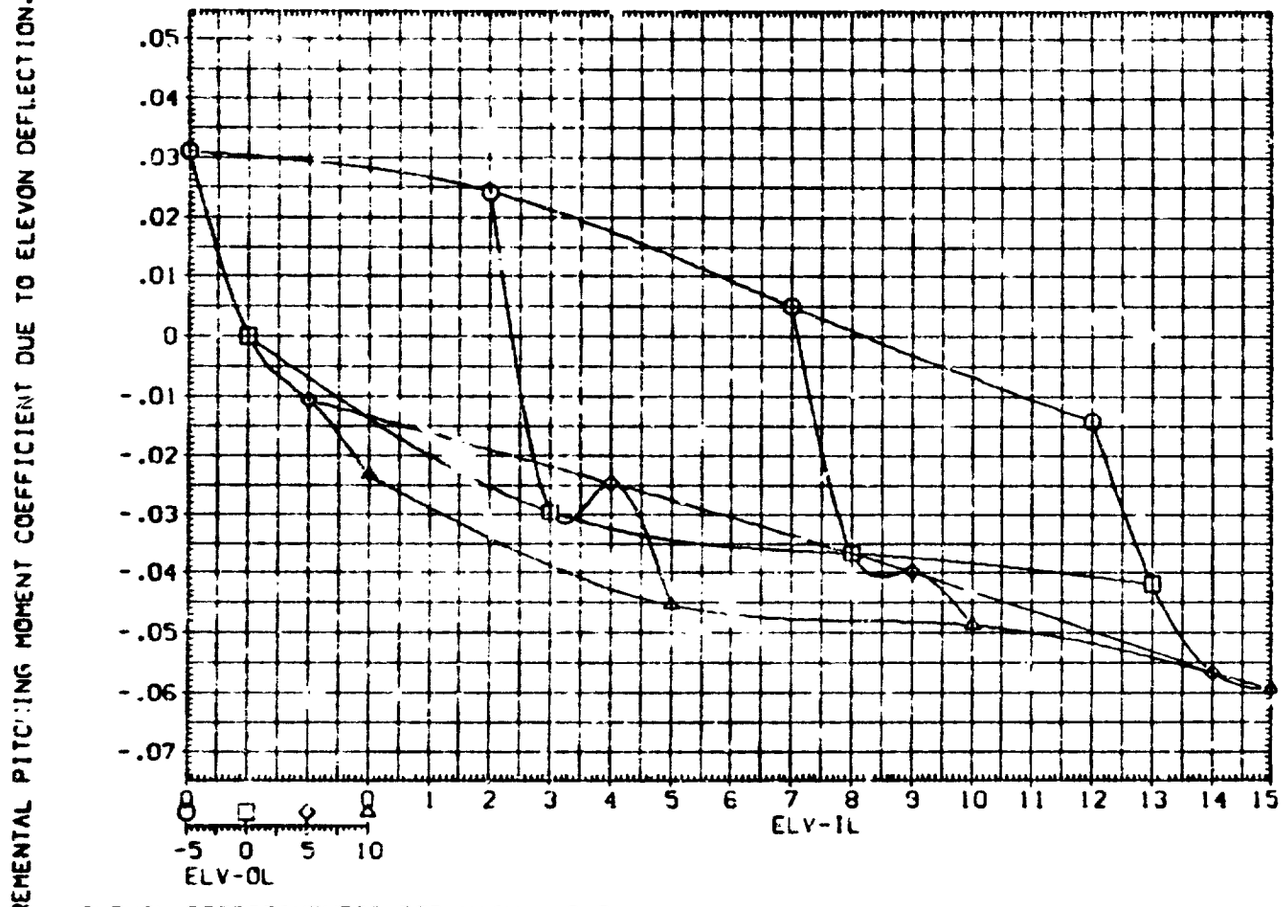
MSFC TWT 622 (A125) 74 DTS, M= 0.6, ALPHA=-2.0 (BINBSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. FT
YMRP	.0000	IN. FT
ZMRP	400.0000	IN. FT
SCALE	.0010	



ELEVON EFFECTIVENESS FOR MACH = 0.6

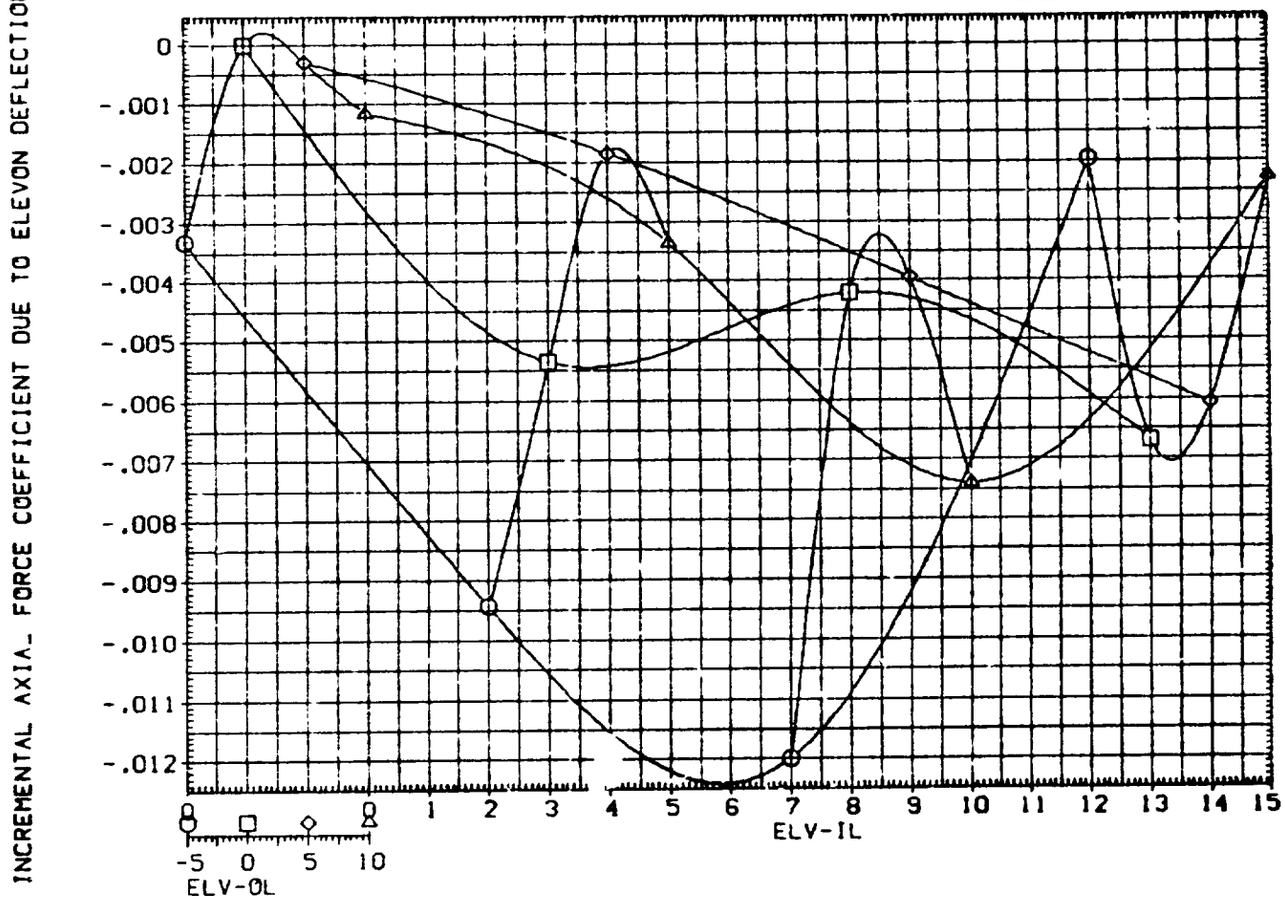
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-2.0 (BINBSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

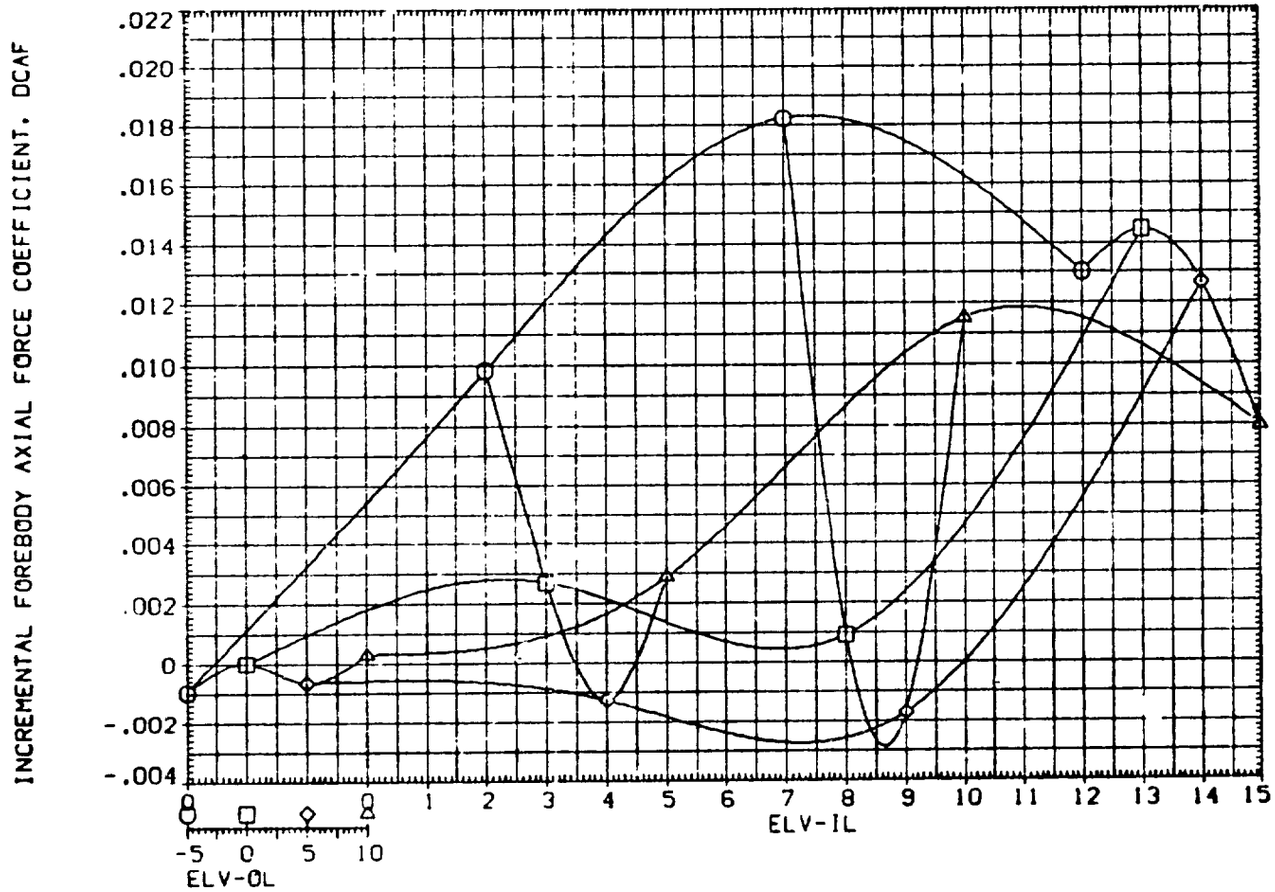
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA=-2.0 (BINBSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

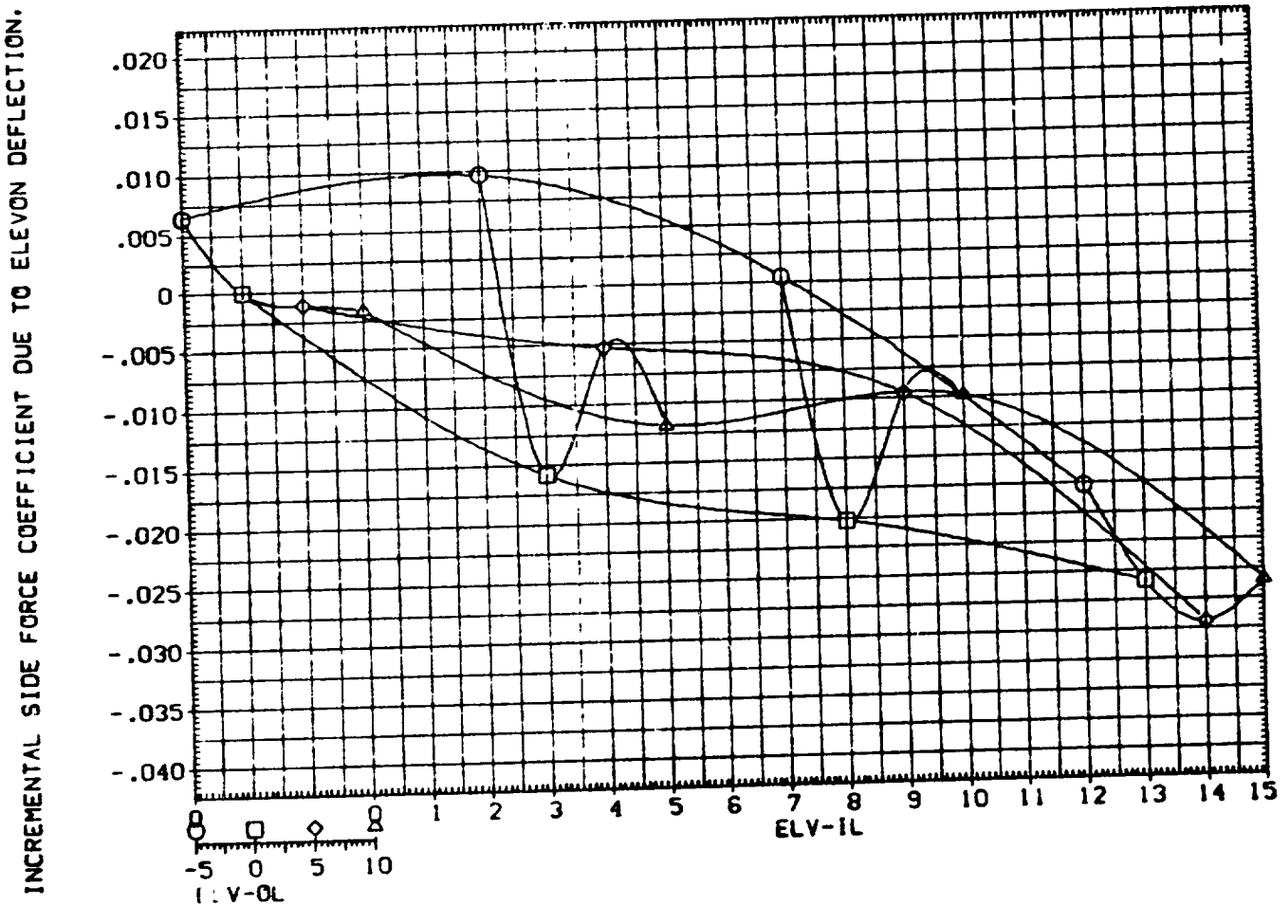
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-2.0 (B1NBSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

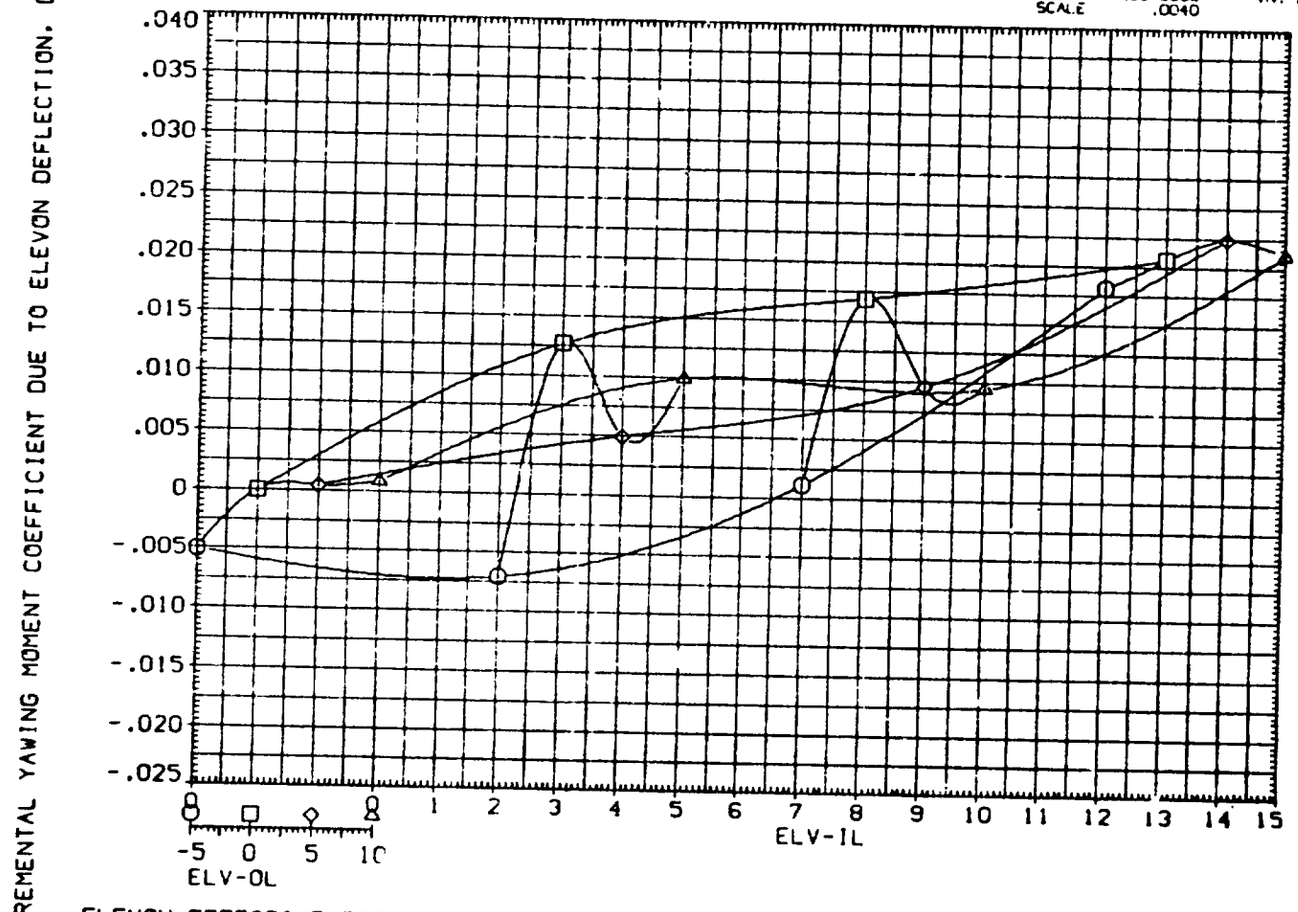
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA=-2.0 (BINBSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

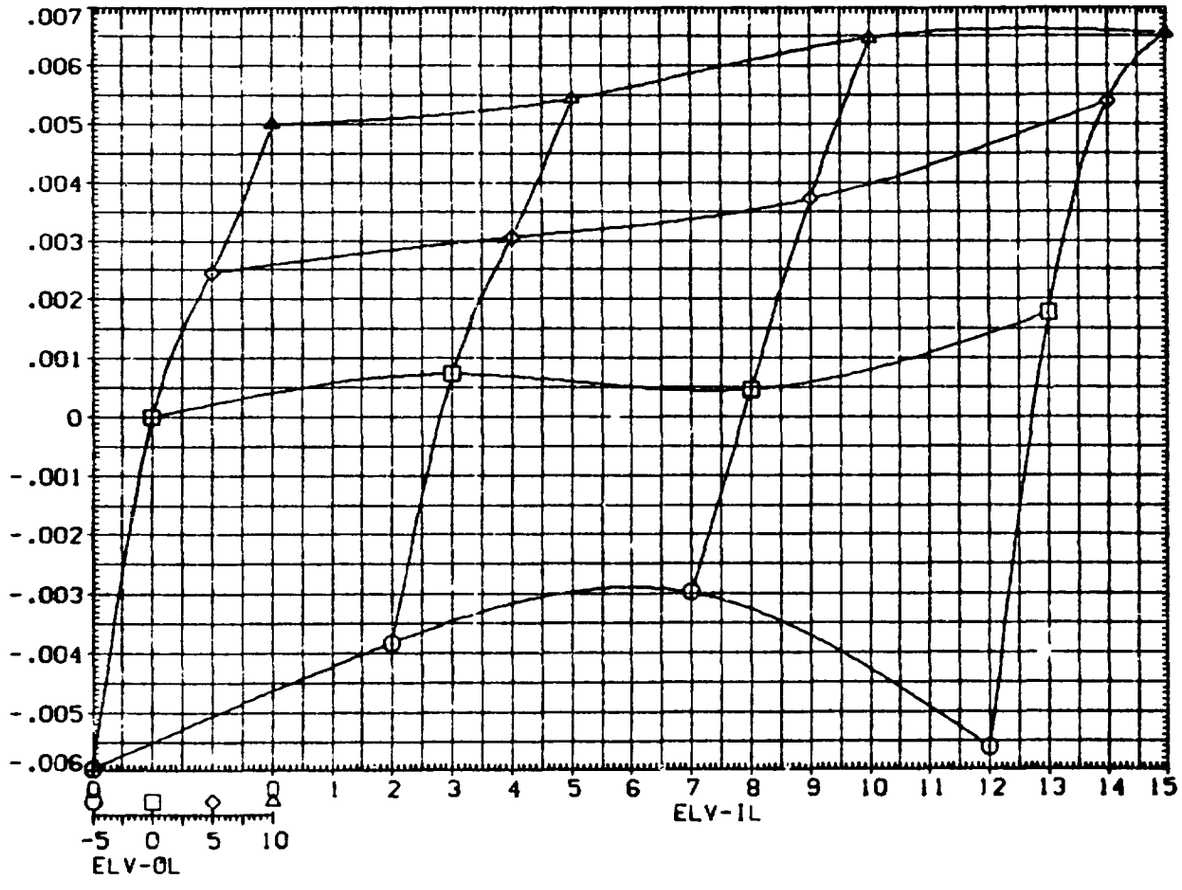
MSFC TWT 622 (1A125) 74 OTS. M= 0.6. ALPHA=-2.0 (B1NBSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

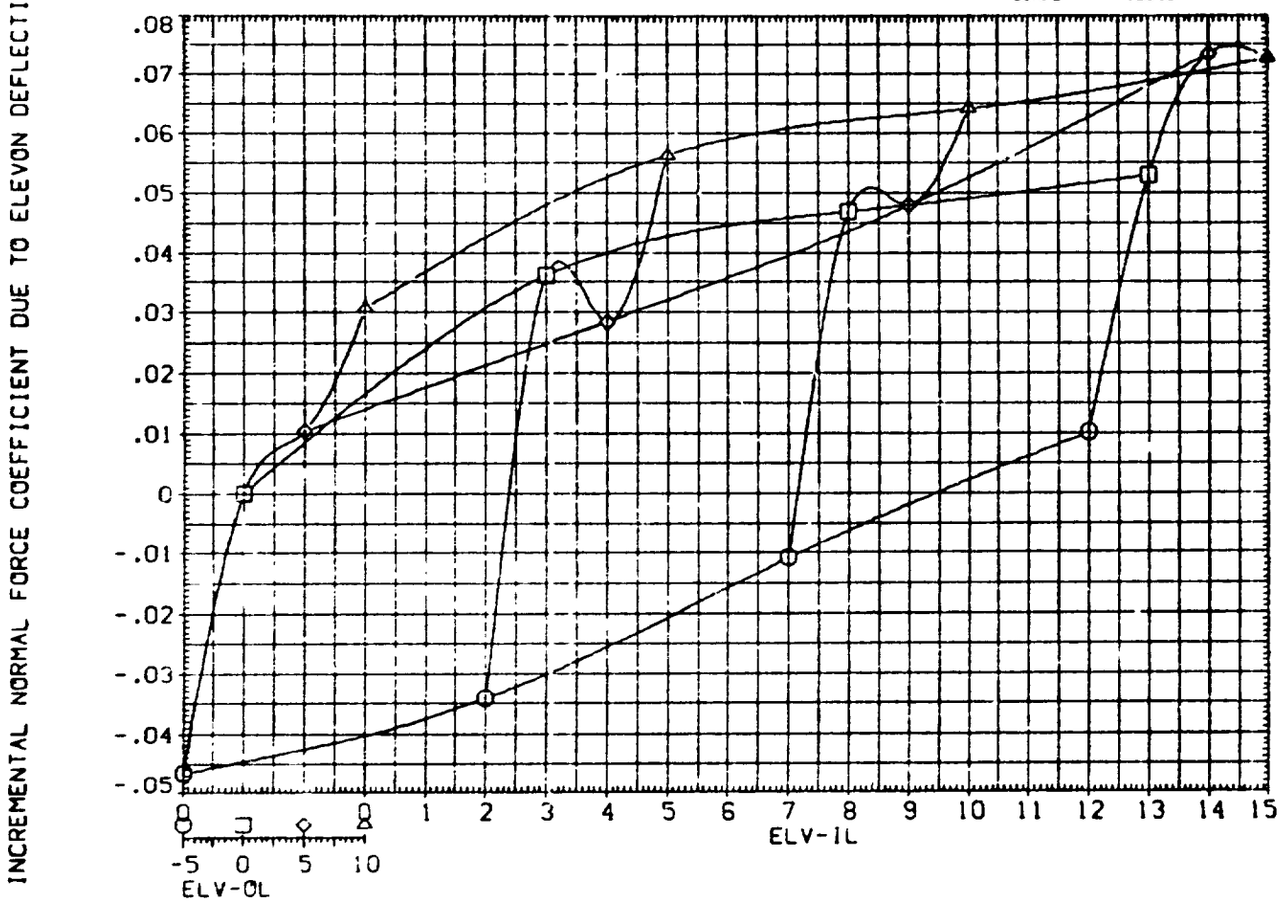
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 0.0 (BINBSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

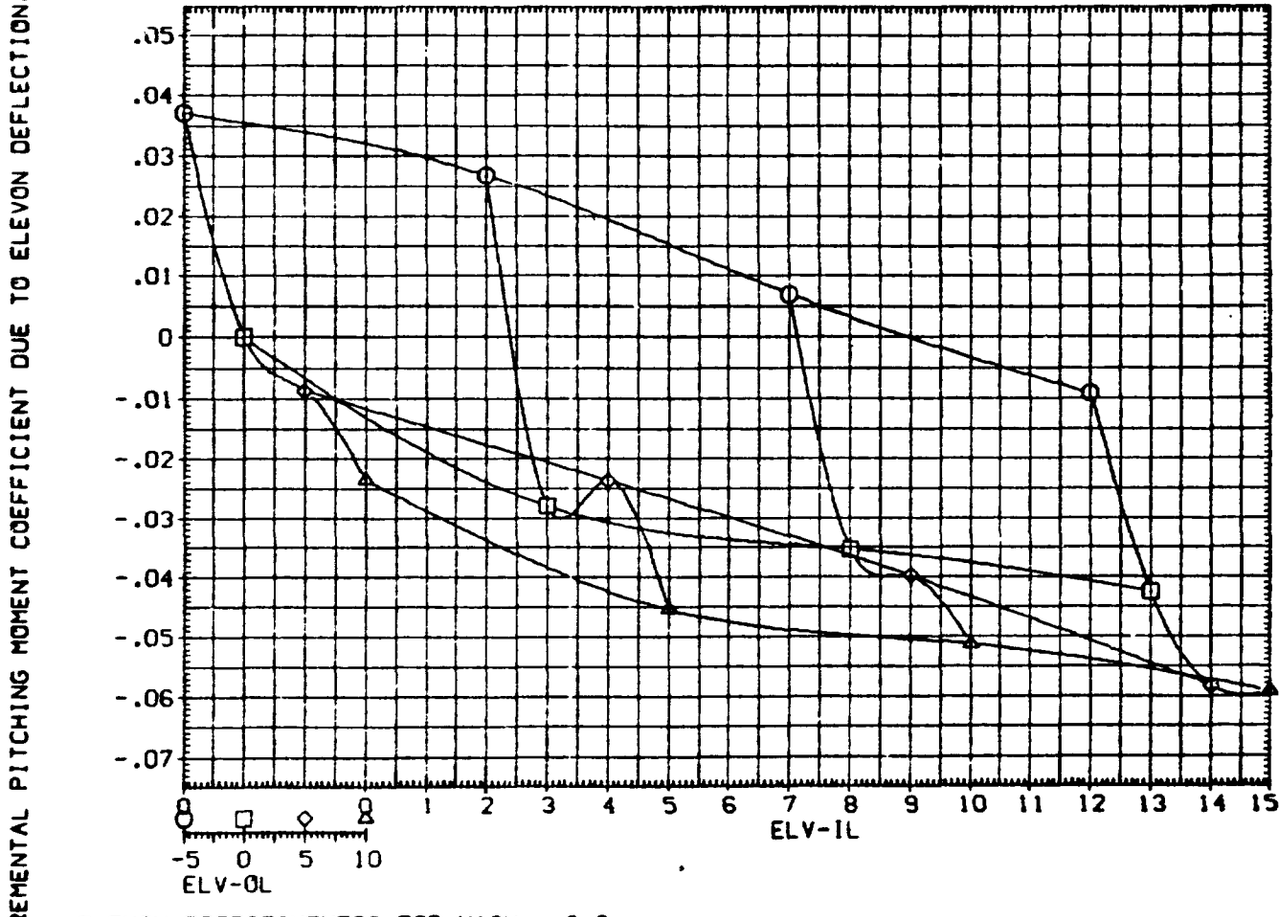
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA= 0.0 (BINBSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

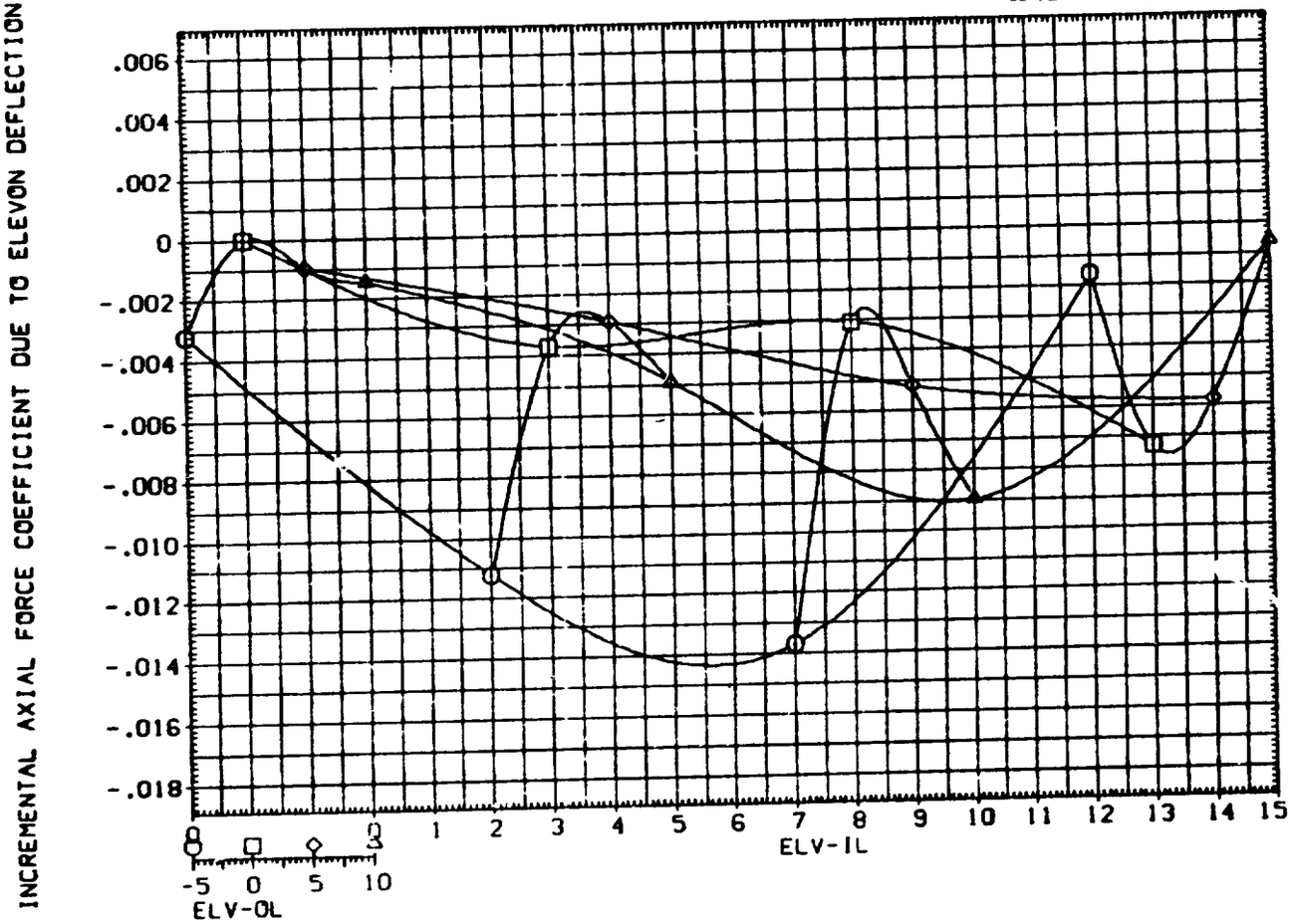
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA= 0.0 (B1NBSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

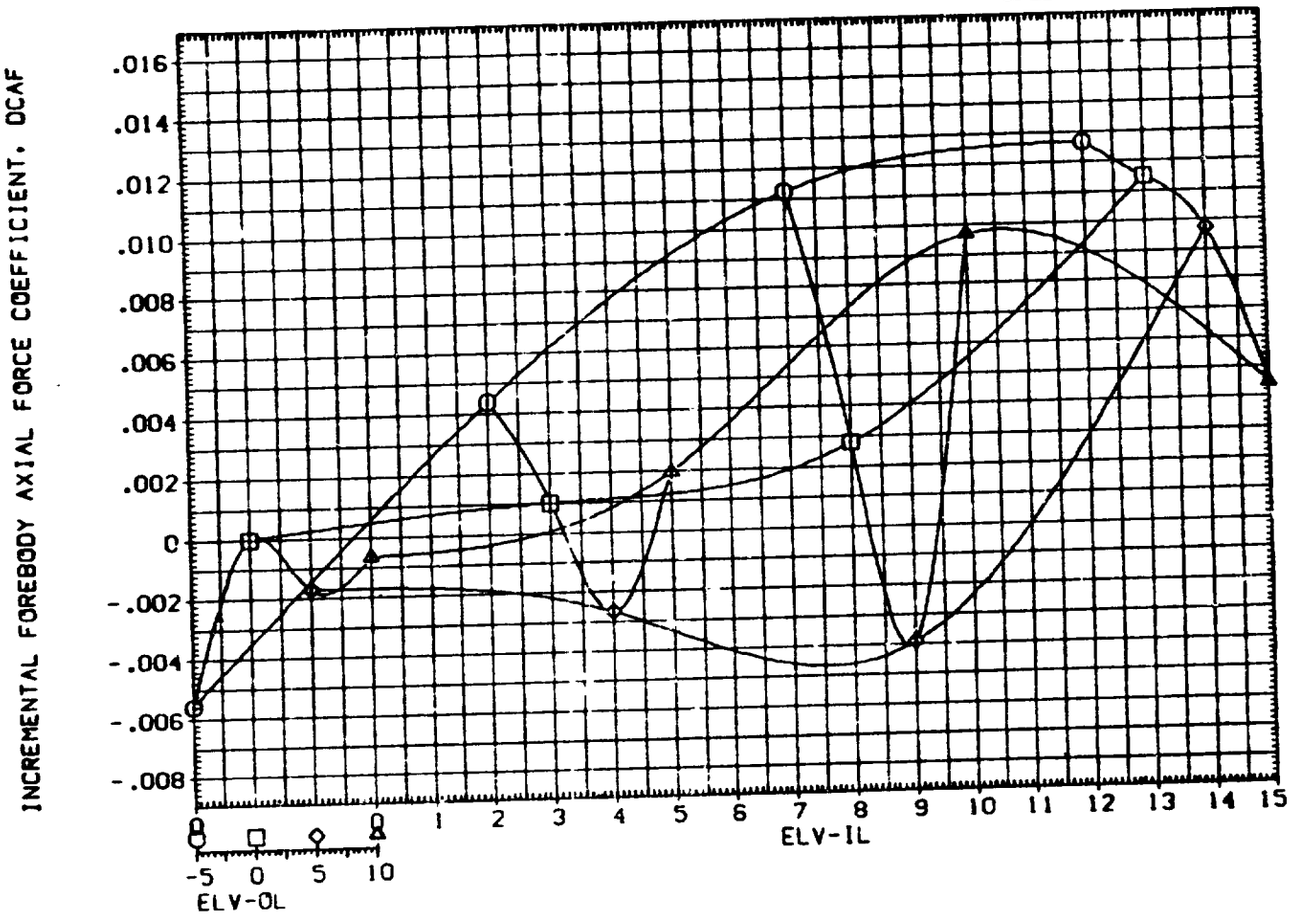
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 0.0 (BINBSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

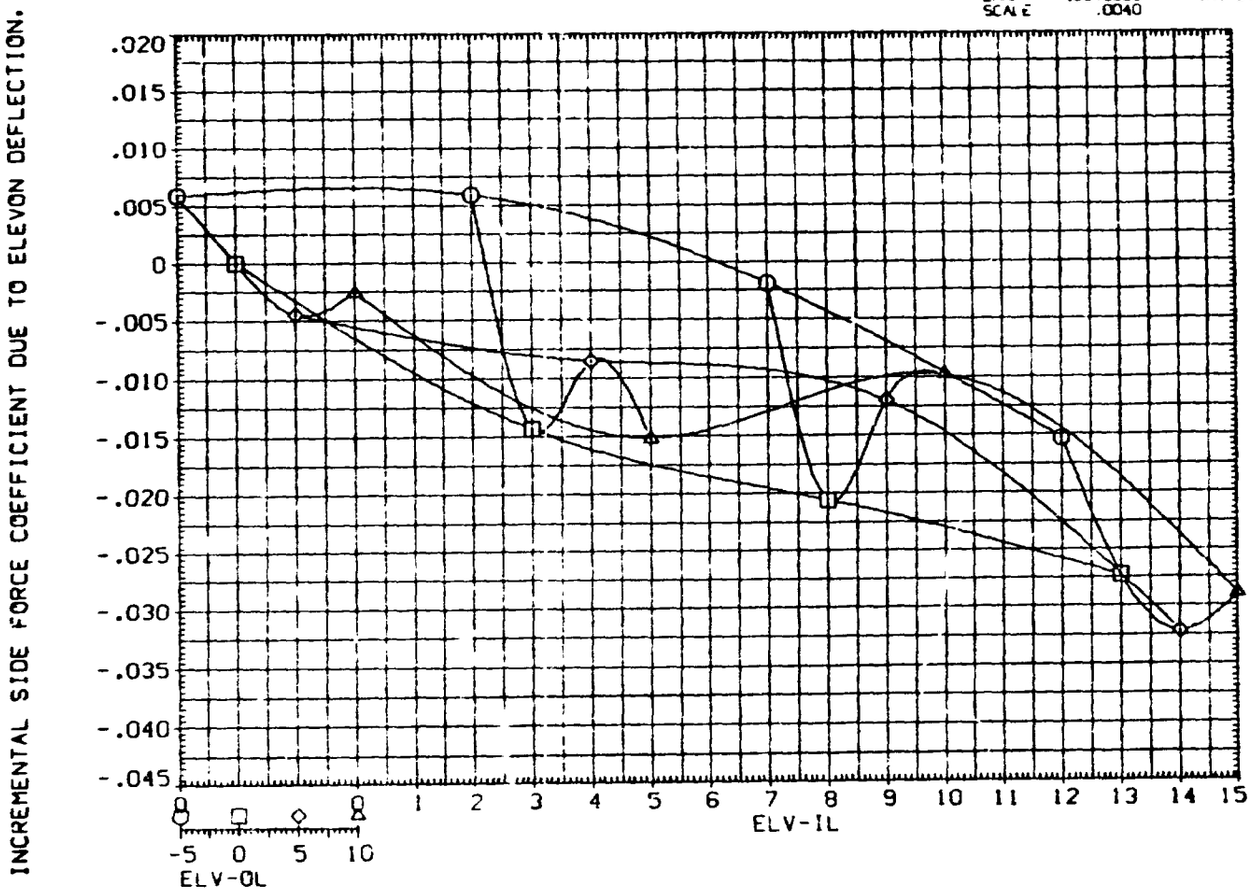
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA= 0.0 (B1NBSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	000
MACH	.600	ELV-1R	000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

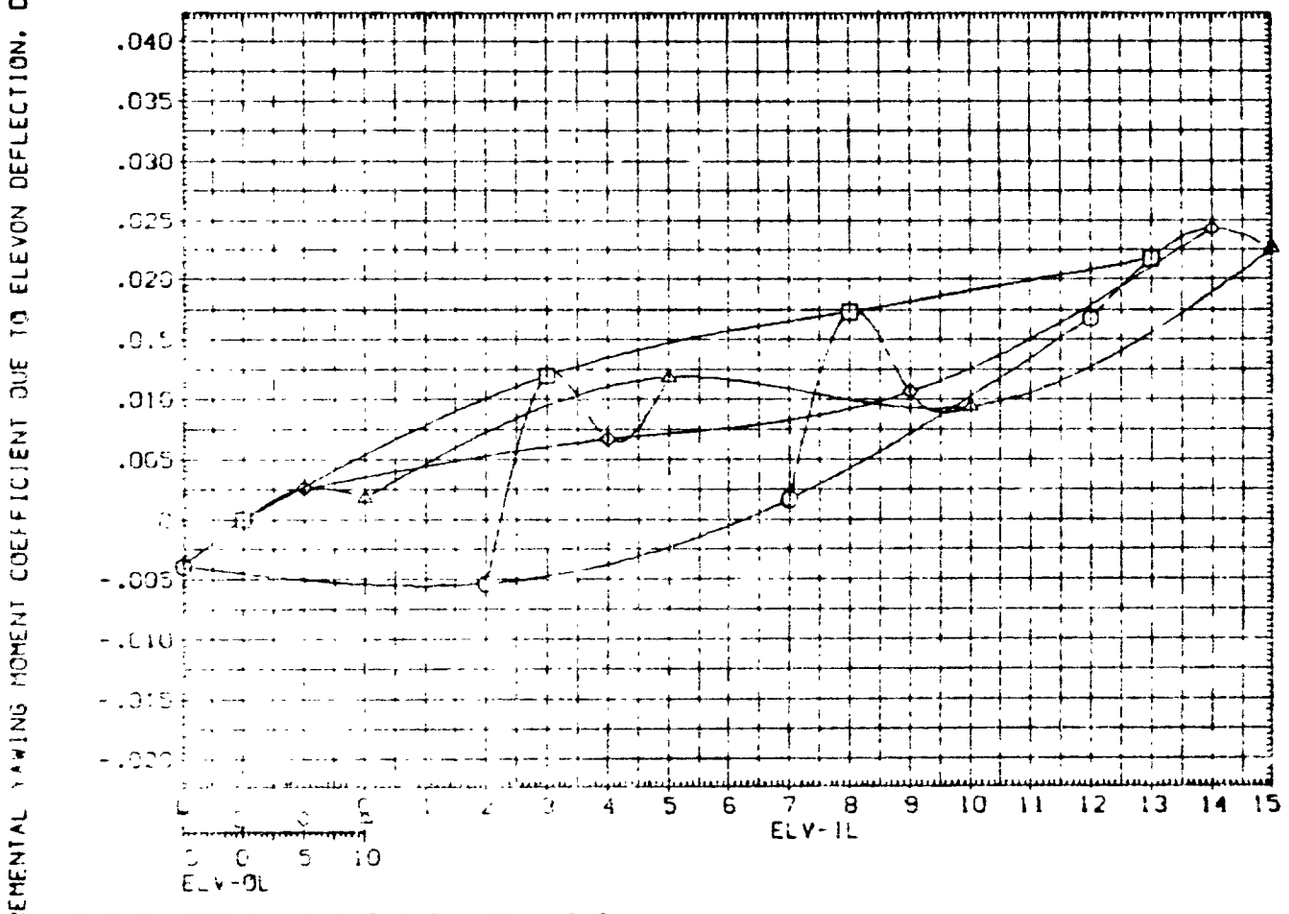
MSFC TWT 622 (IA125) 74 OTS. M= 0.6, ALPHA= 0.0 (BINBSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	0.000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

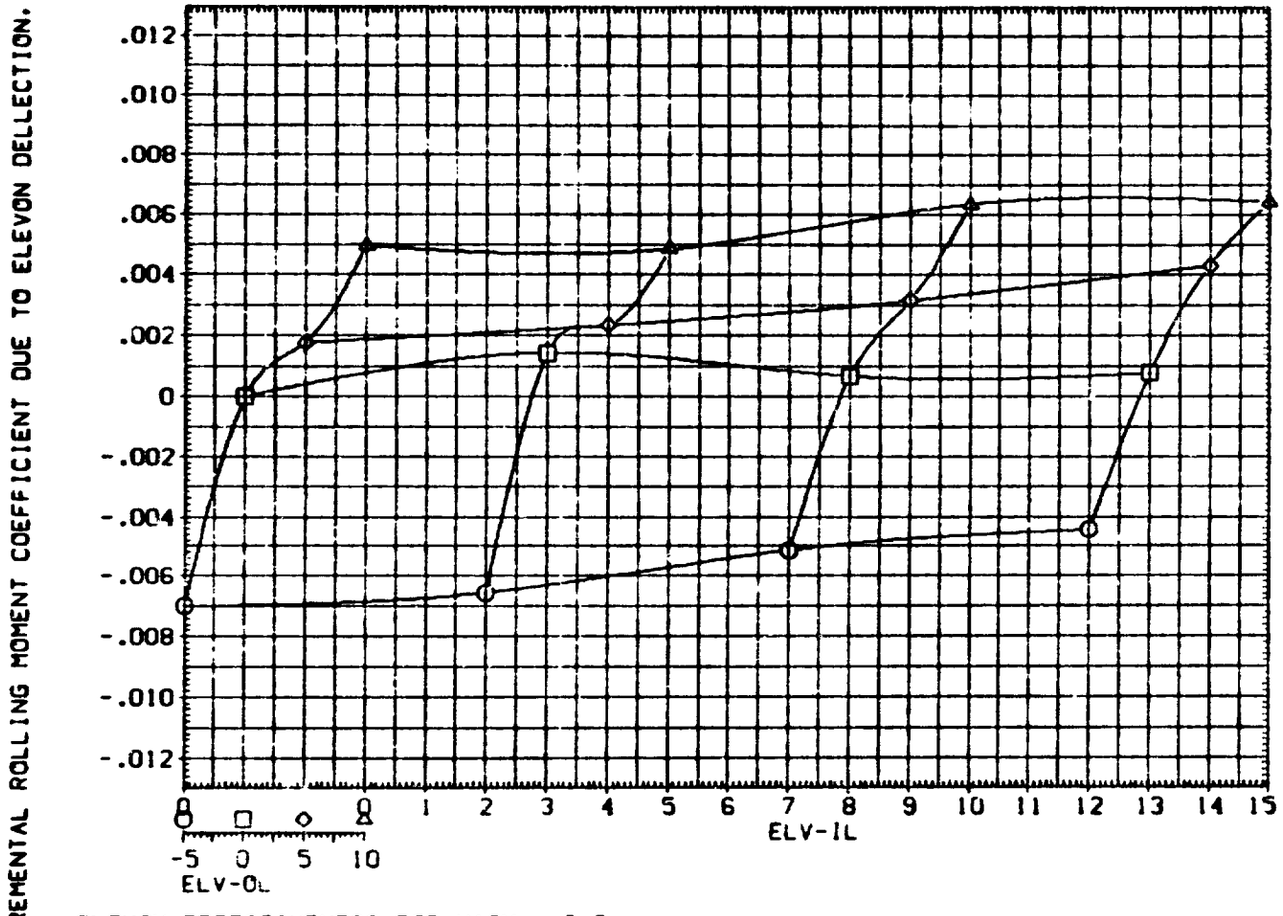
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA= 0.0 (B1NBSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

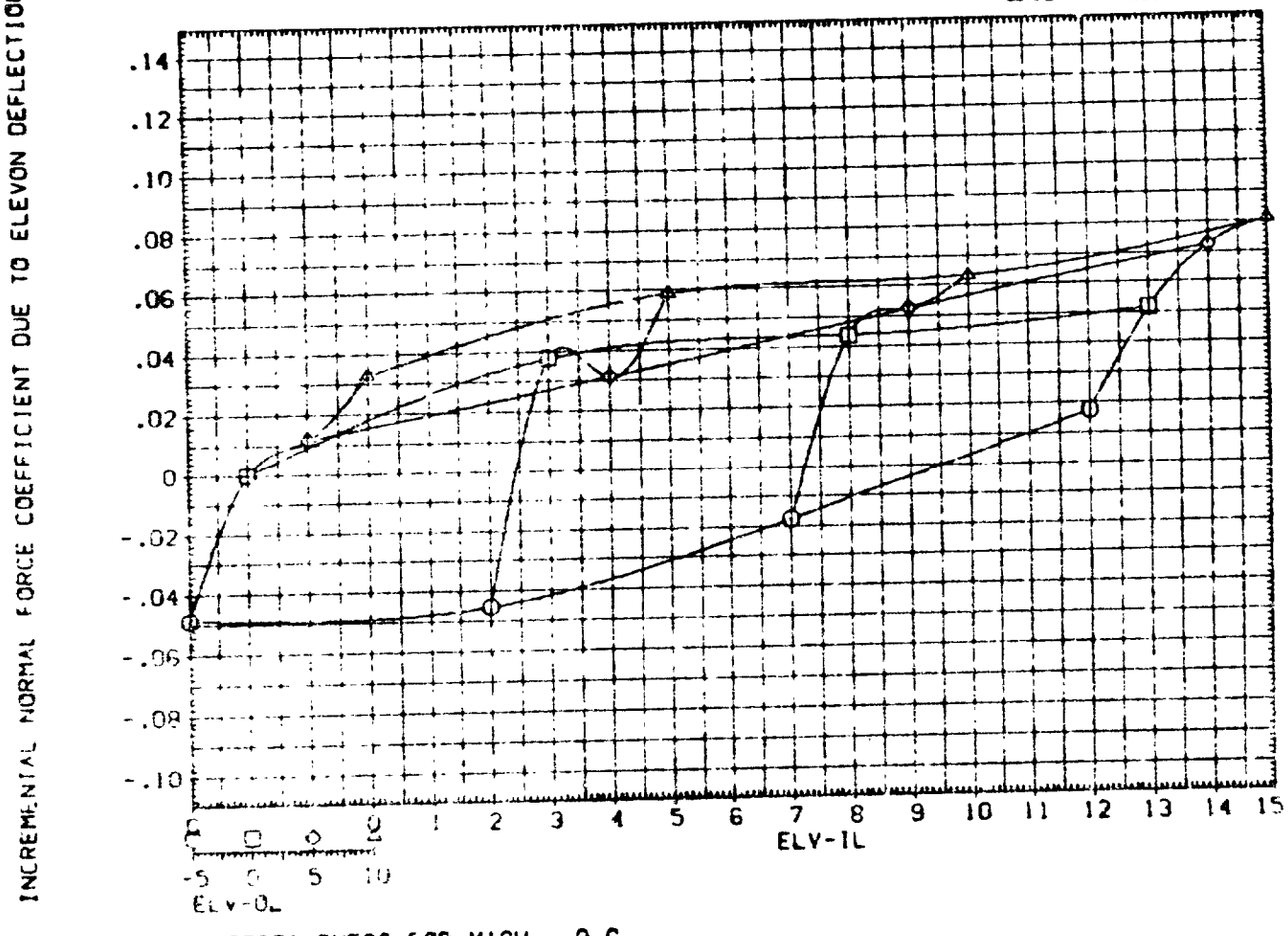
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 2.0 (B1NBSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	.600	ELV-1R	.000
ELV-3R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN YT
ZMRP	400.0000	IN ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

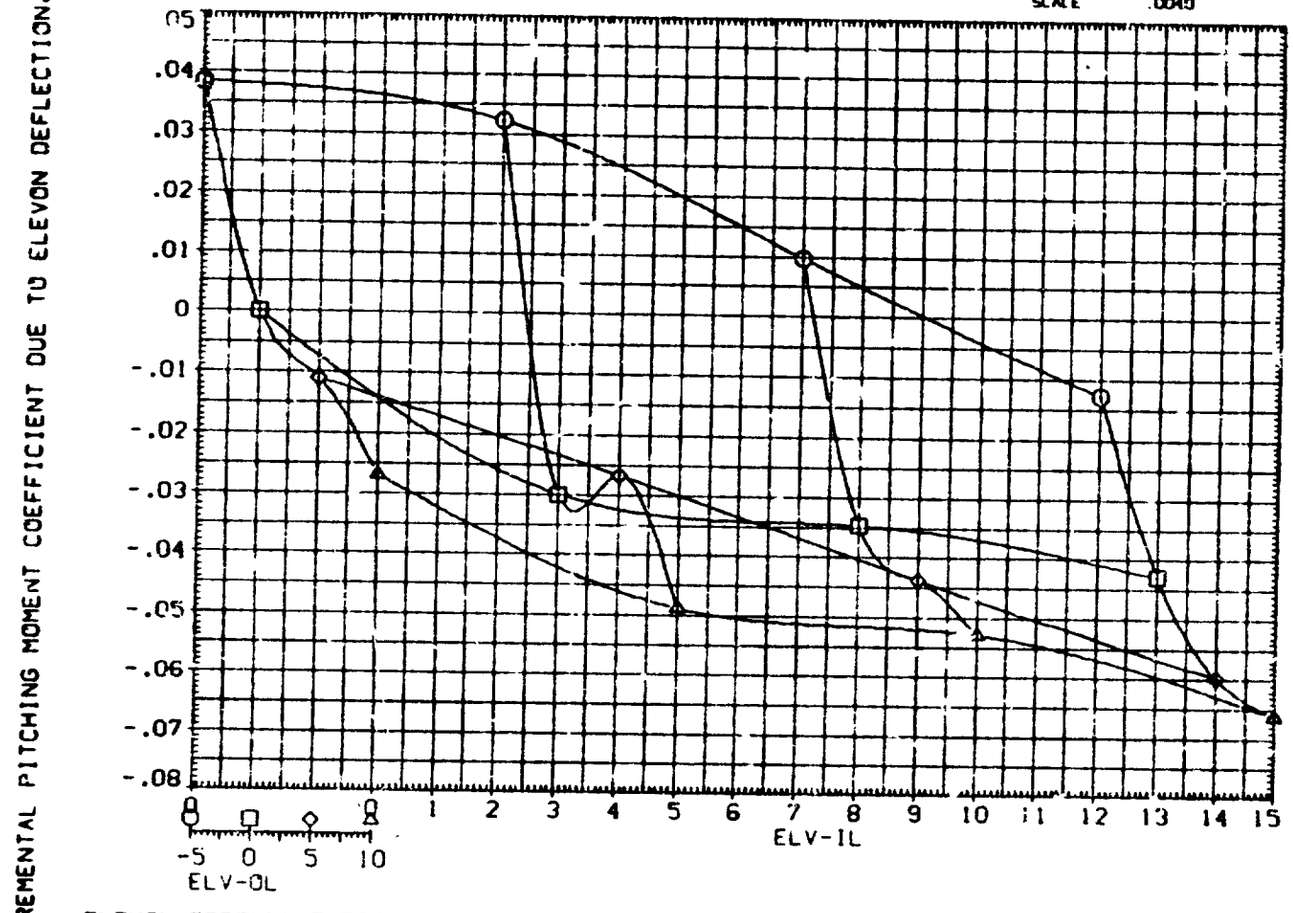
MSFC TWT 622 (IA125) 74 OTS. M= 0.6, ALPHA= 2.0 (BINBSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

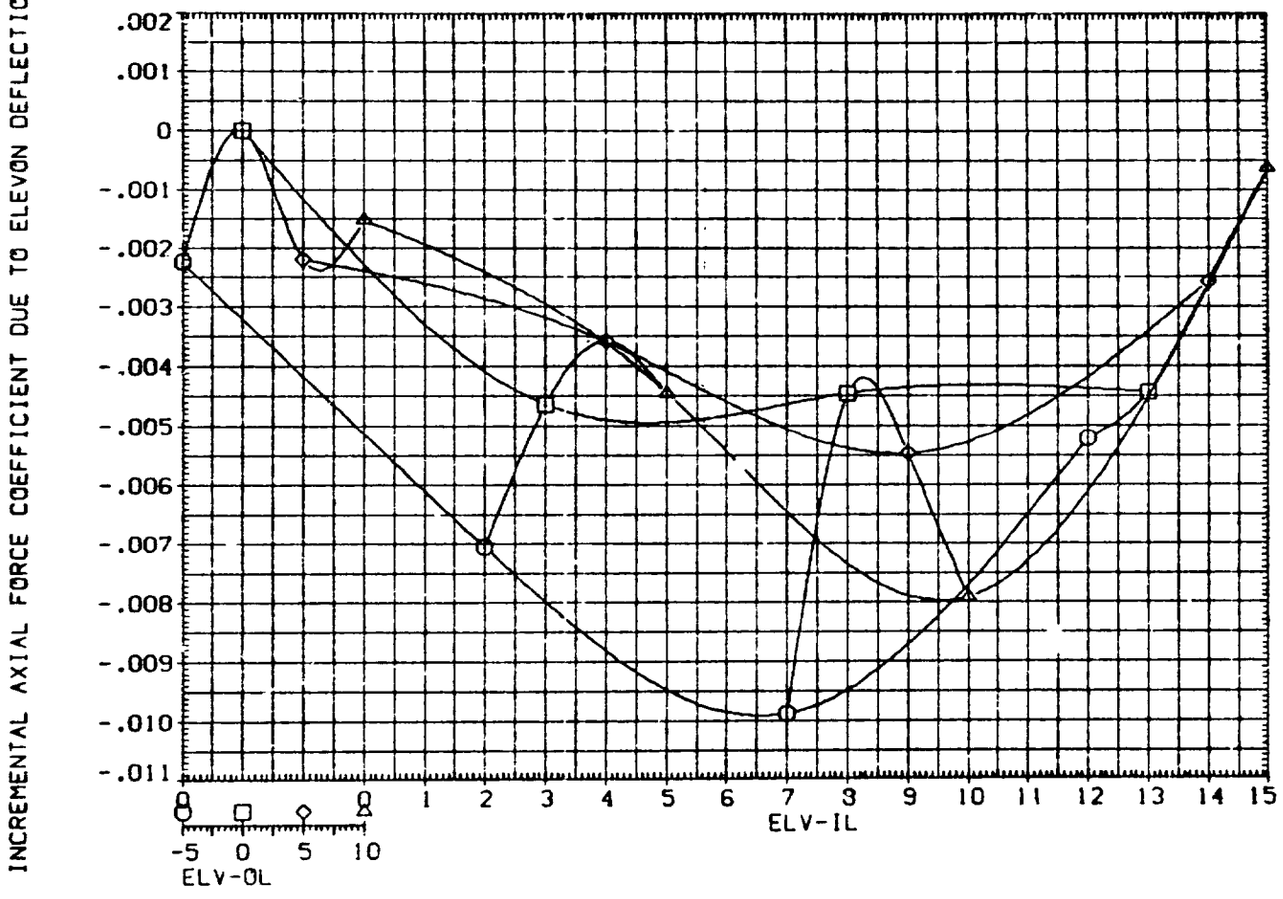
MSFC TW1 622 (IA125) 74 OTS. M= 0.6. ALPHA= ..0 (B1NBSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.300
MACH	.600	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0340	



ELEVON EFFECTIVENESS FOR MACH = 0.6

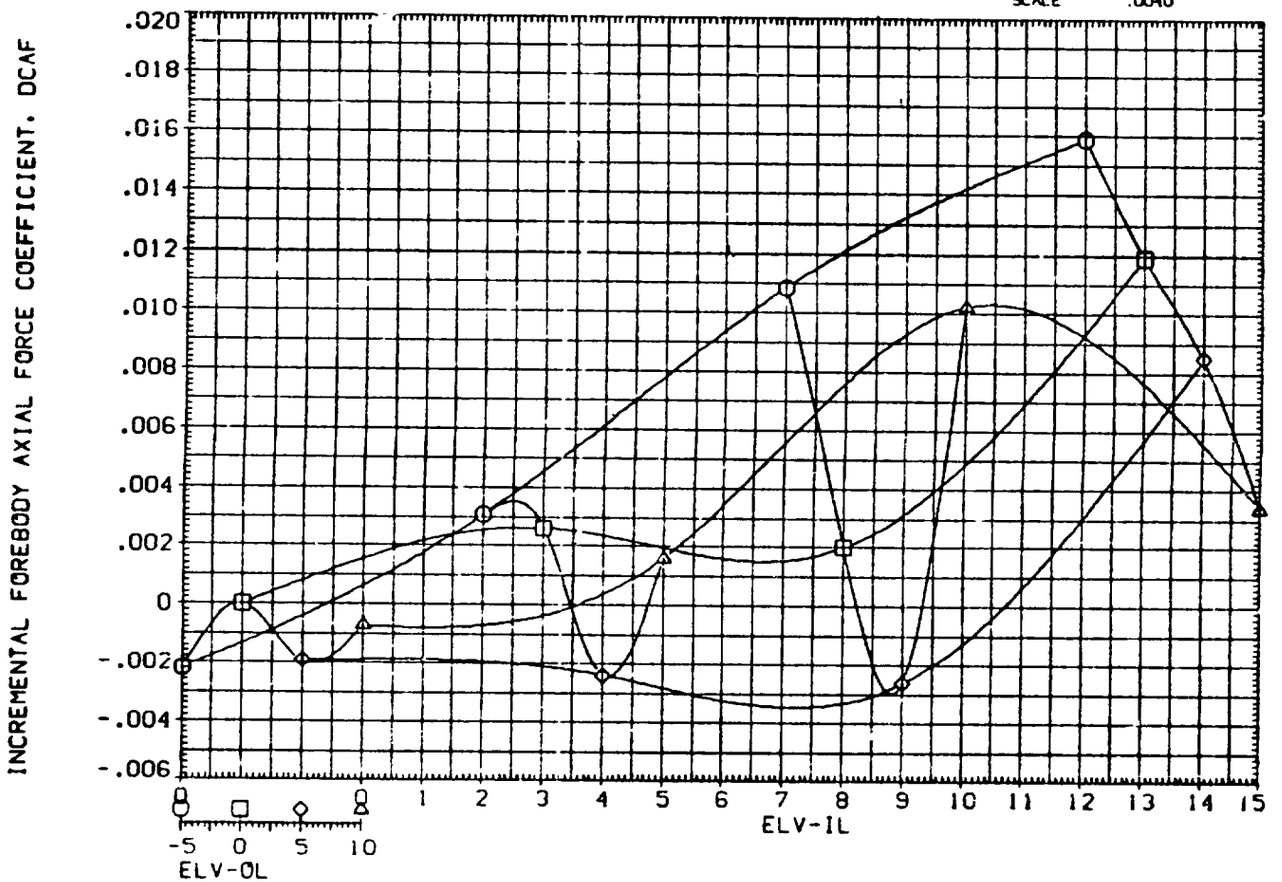
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA= 2.0 (B1NBSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

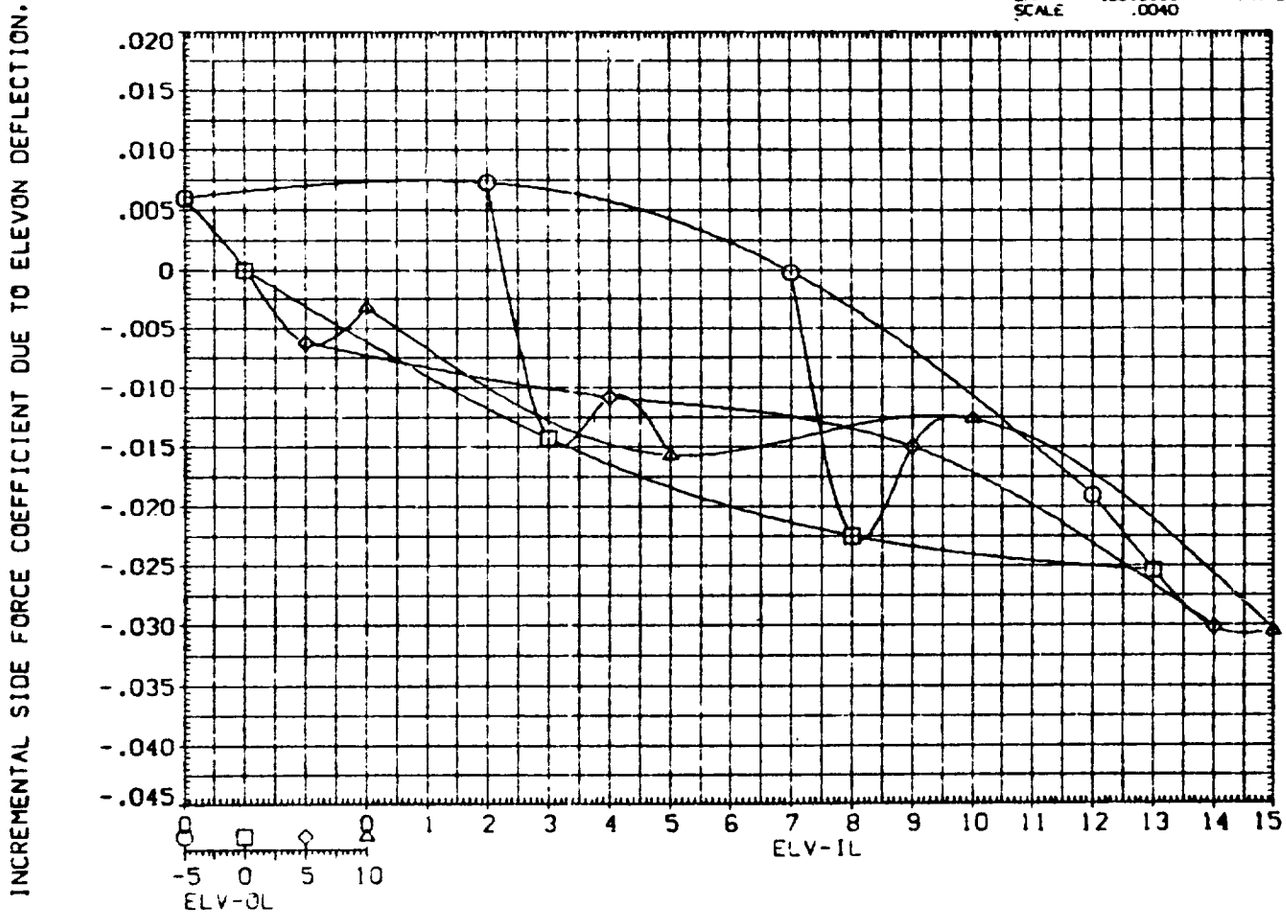
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA= 2.0 (B1NBSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.100
MACH	.600	ELV-IR	.100
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

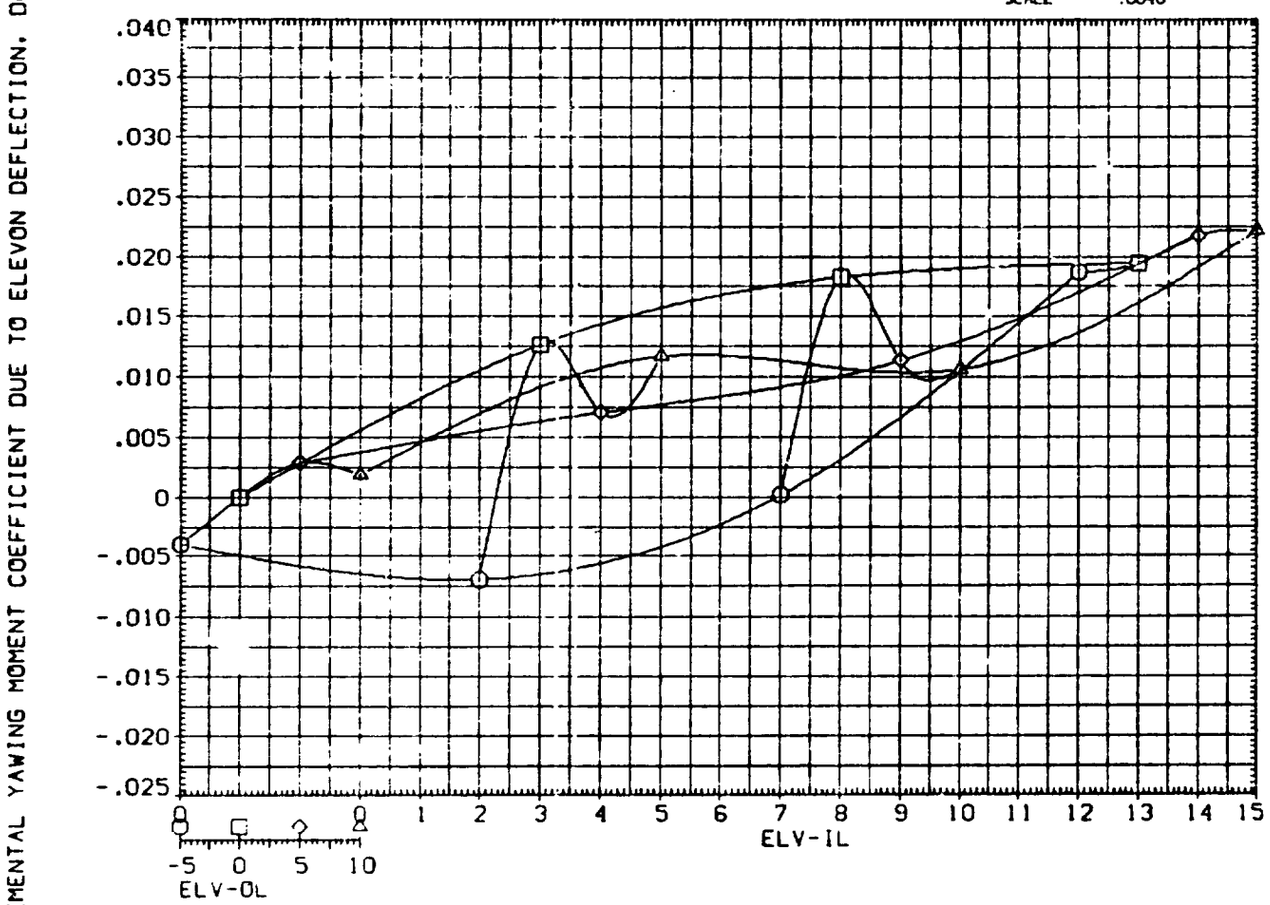
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 2.0 (B1N9SG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	.600	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

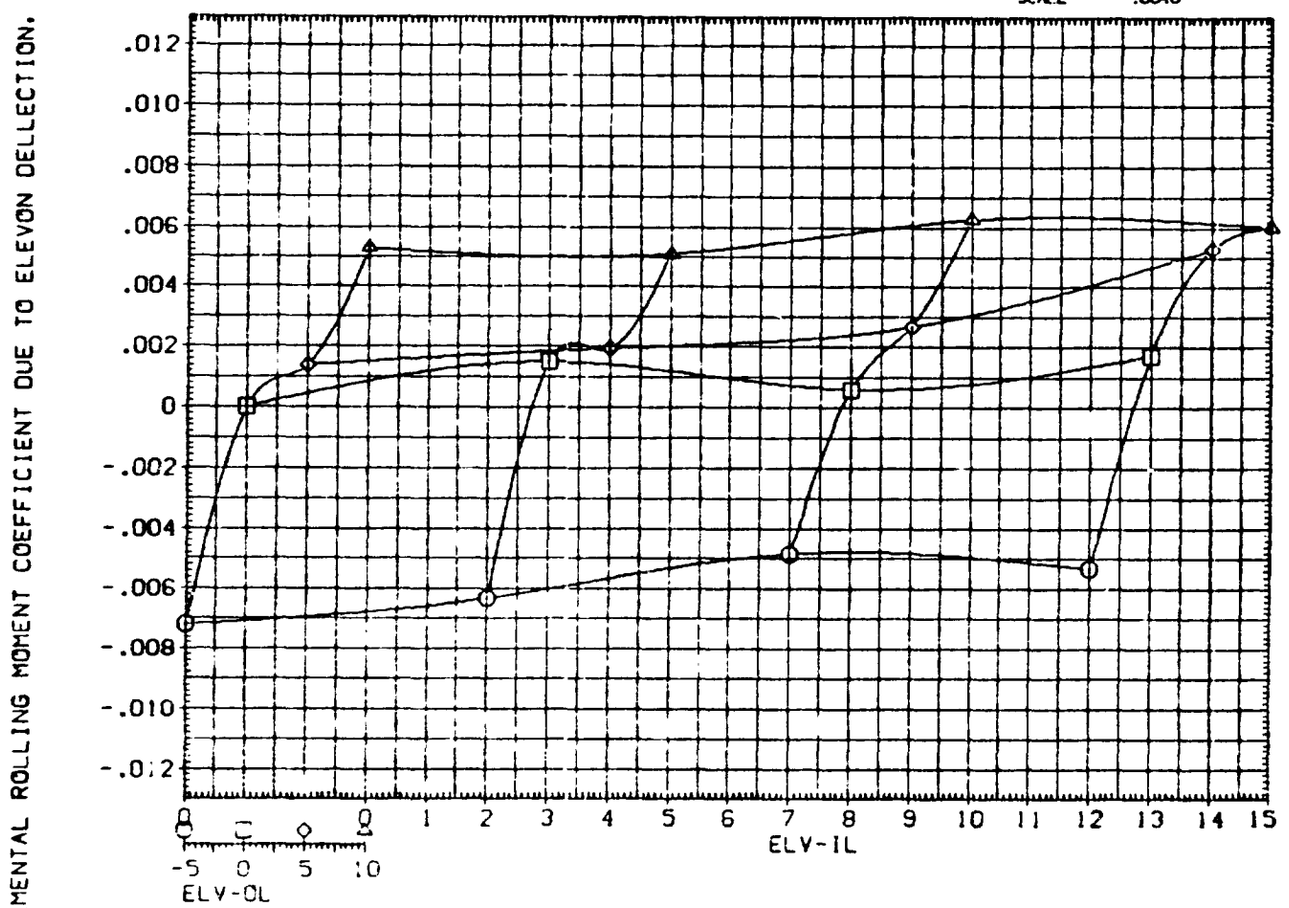
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 2.0 (B1NBSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	.600	ELV-IR	000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

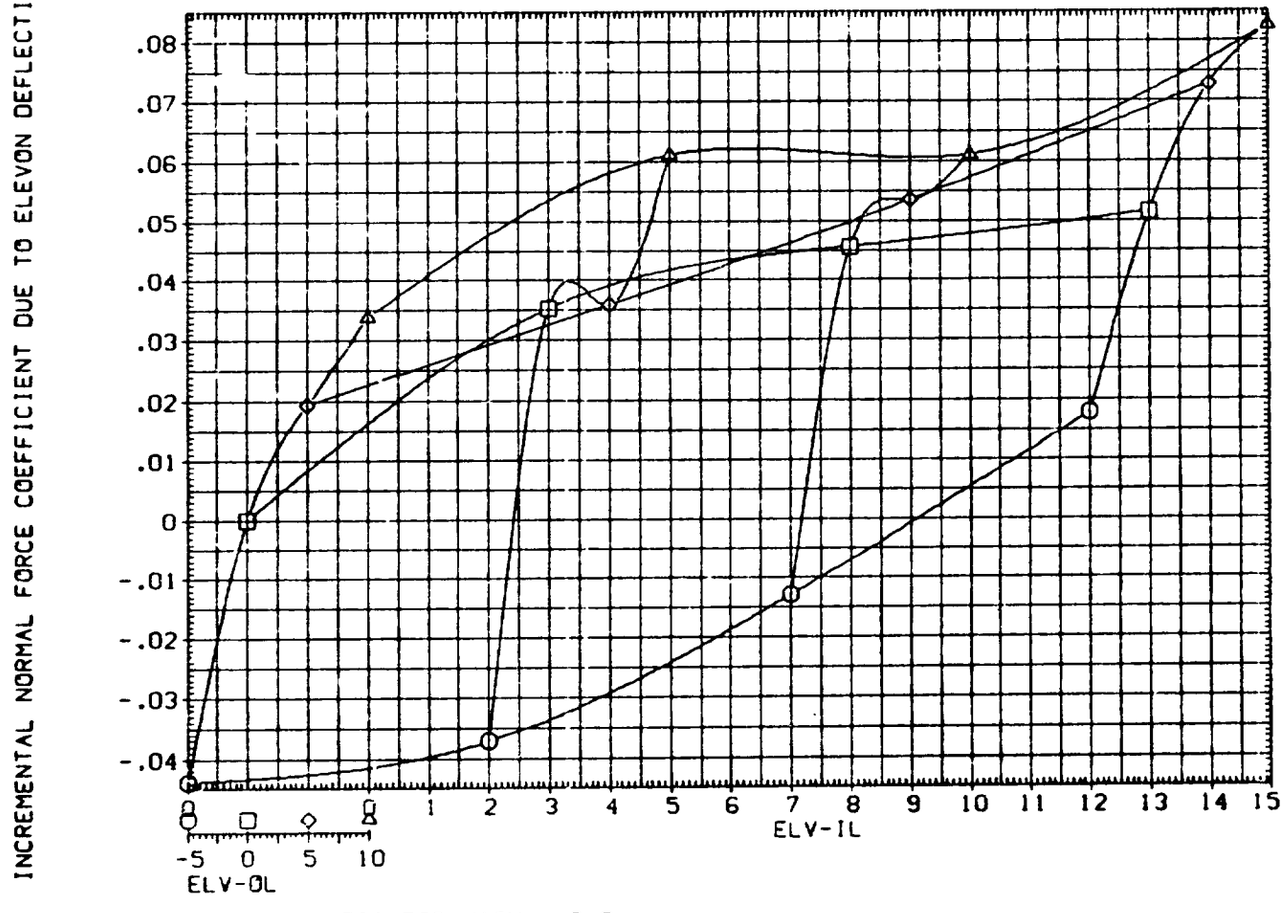
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 4.0 (BINBSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

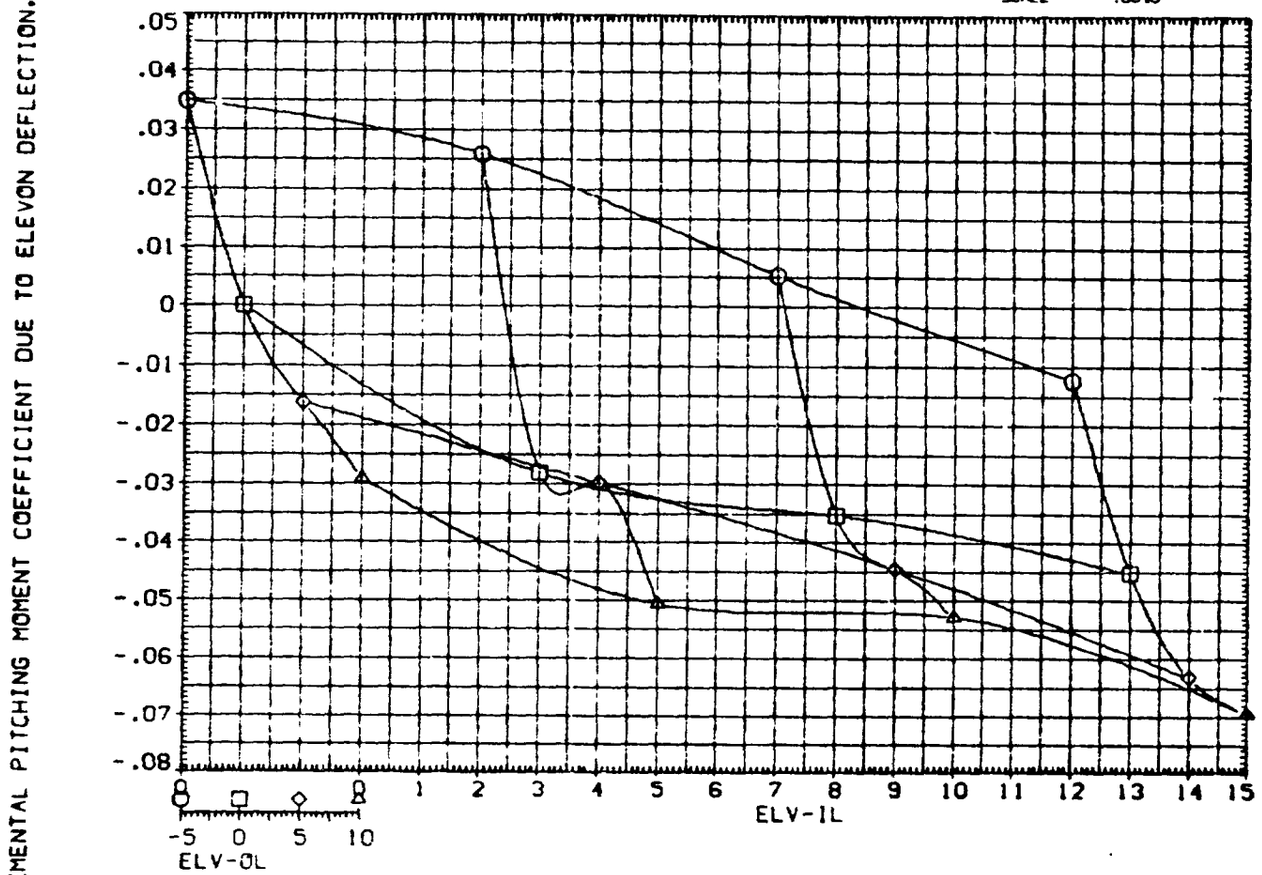
MSFC TWT 622 (IA125) 74 OTS. M= 0.6, ALPHA= 4.0 (BINBSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

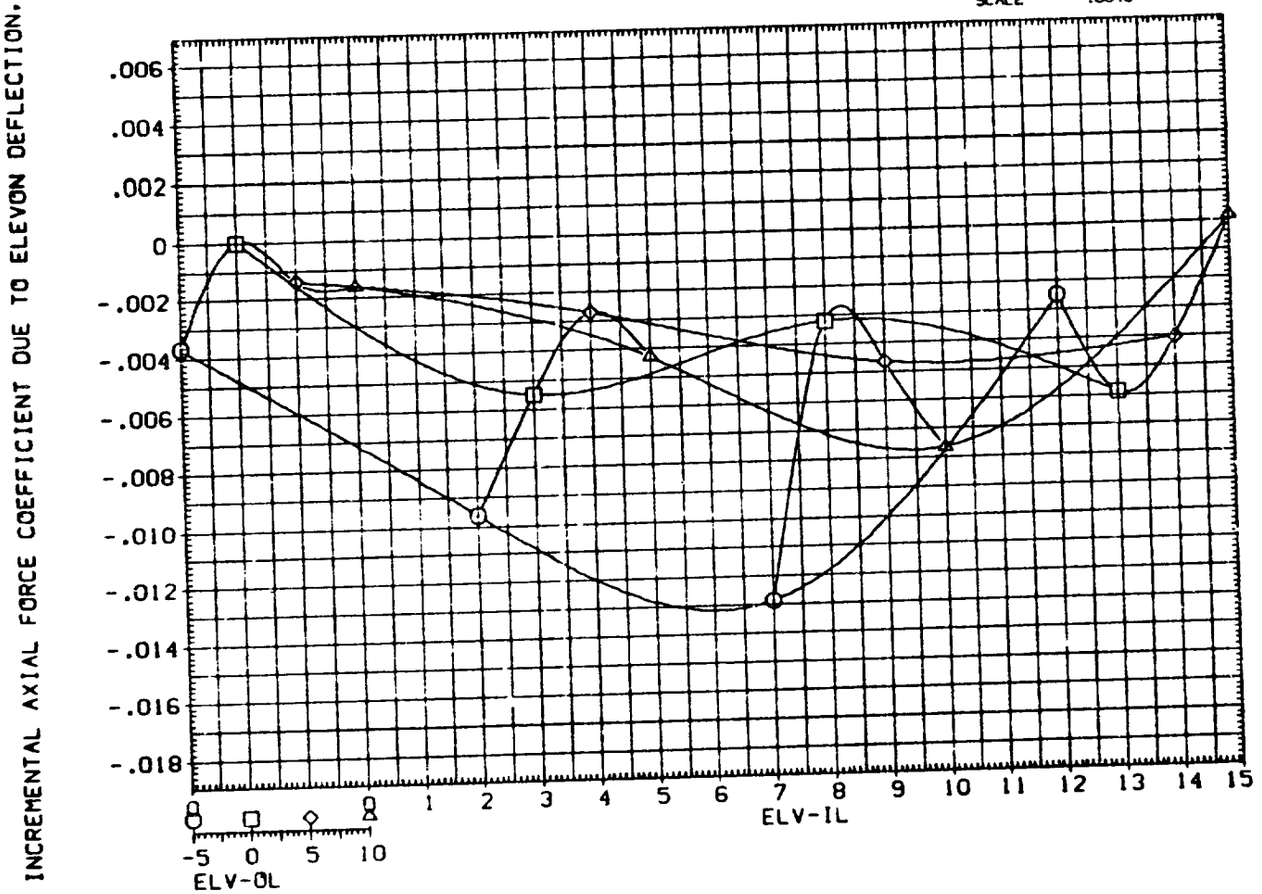
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 4.0 (BINBSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

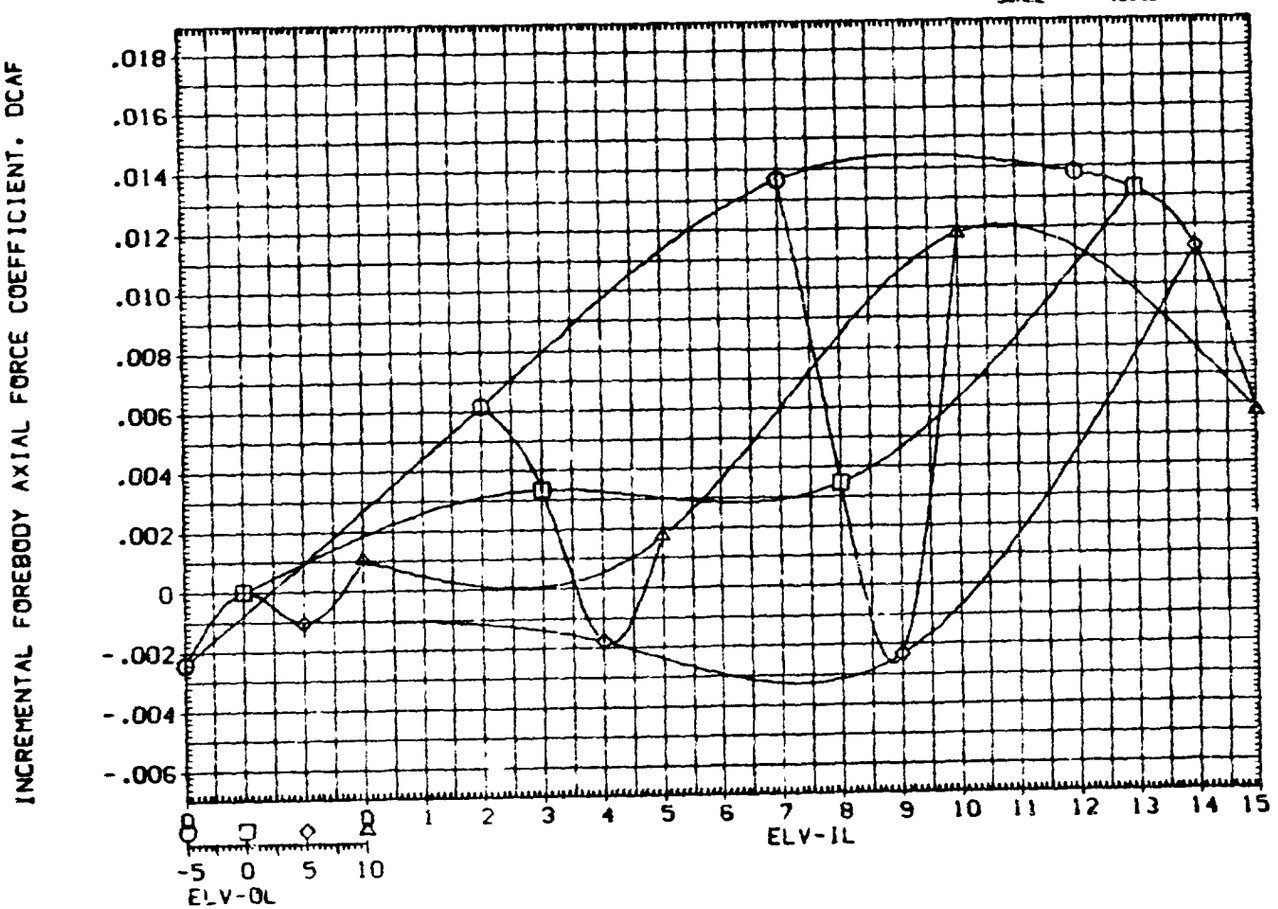
MSFC TWT 622 (!A125) 74 OTS. M= 0.6, ALPHA= 4.0 (BINBSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	.600	ELV-IR	.300
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

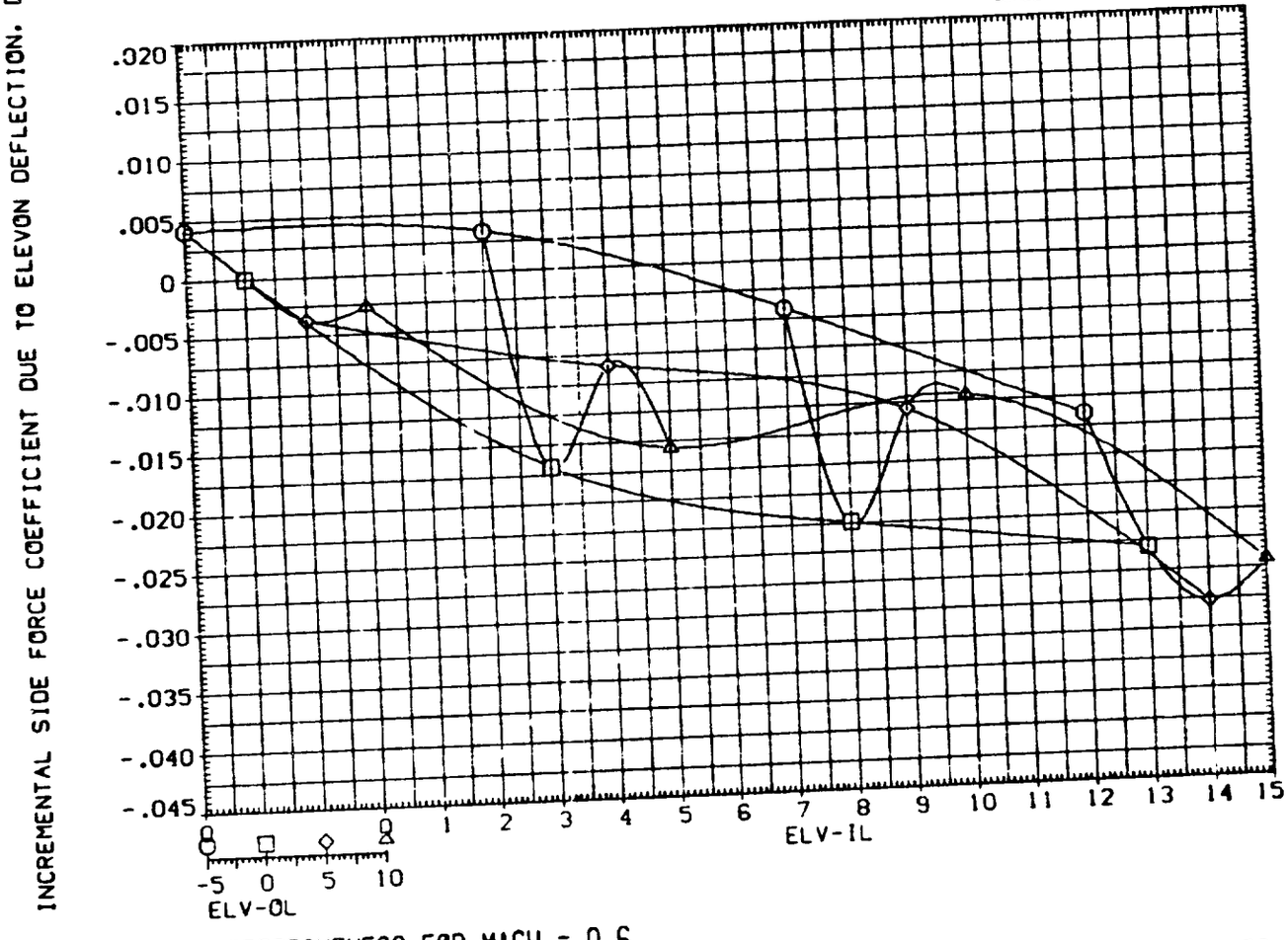
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 4.0 (B1NBSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4 000
MACH	.600	ELV-1R	000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

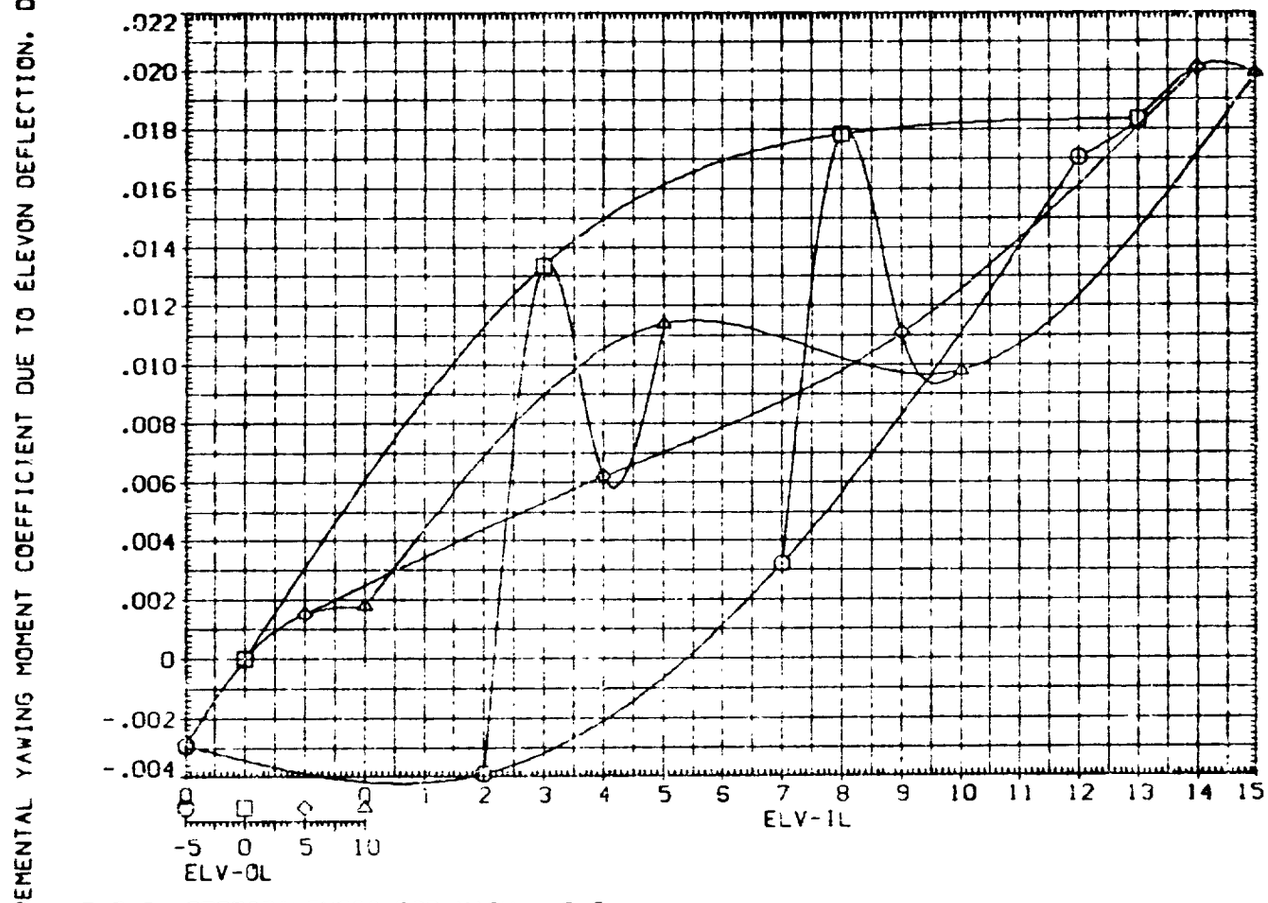
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 4.0 (BINBSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

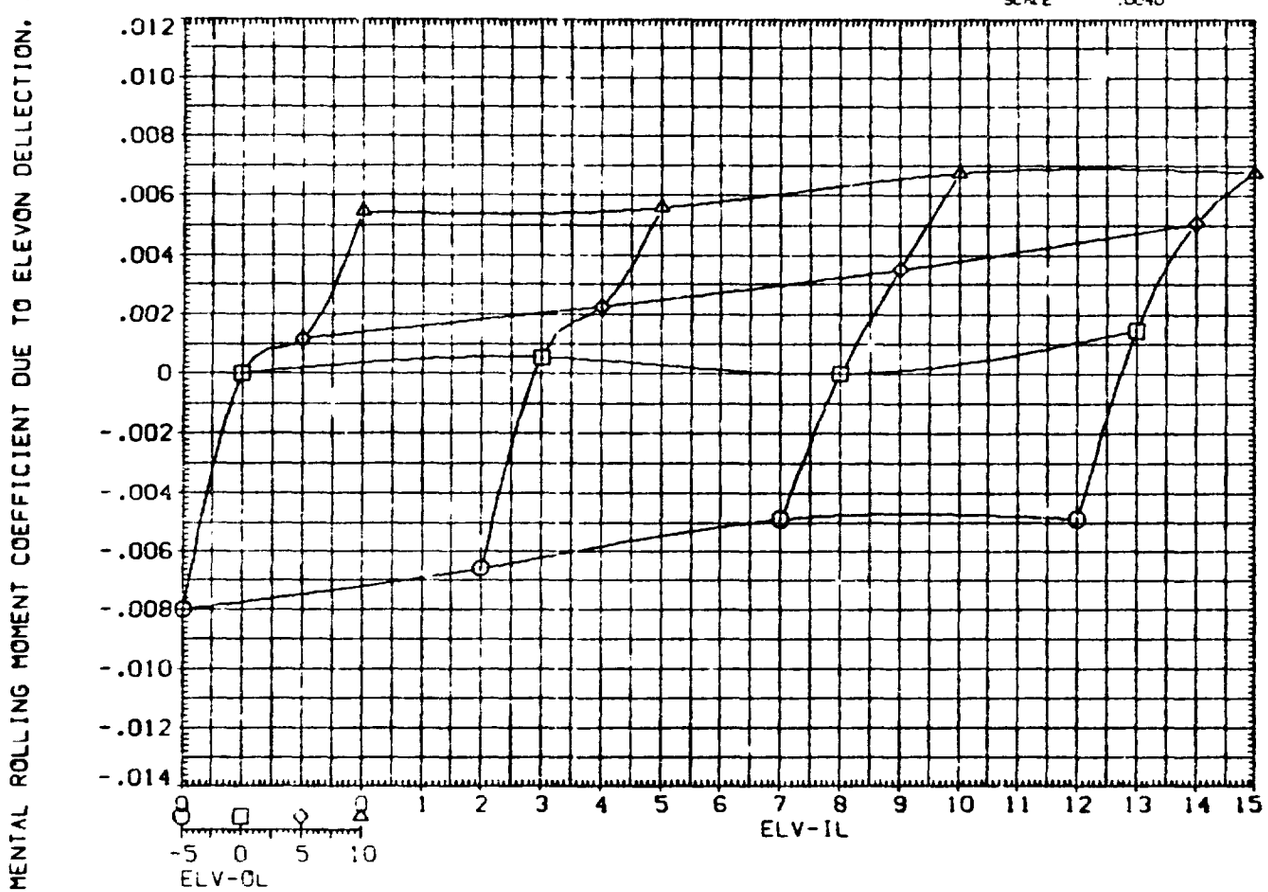
MSFC TWT 622 (IA125) 74 OTS. M= 0.6, ALPHA= 4.0 (BINBSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	.600	ELV-IR	000
ELV-OR	000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

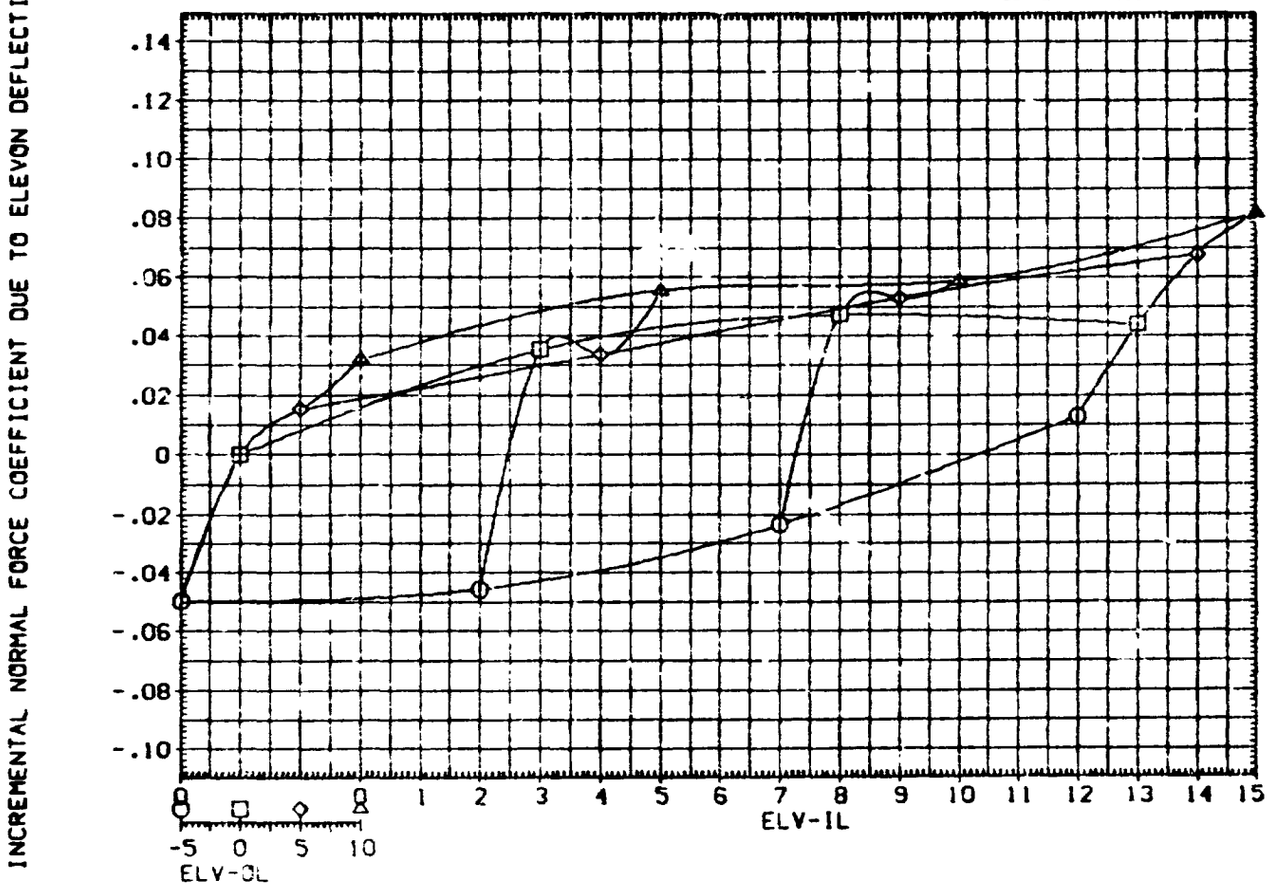
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 6.0 (BINBSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

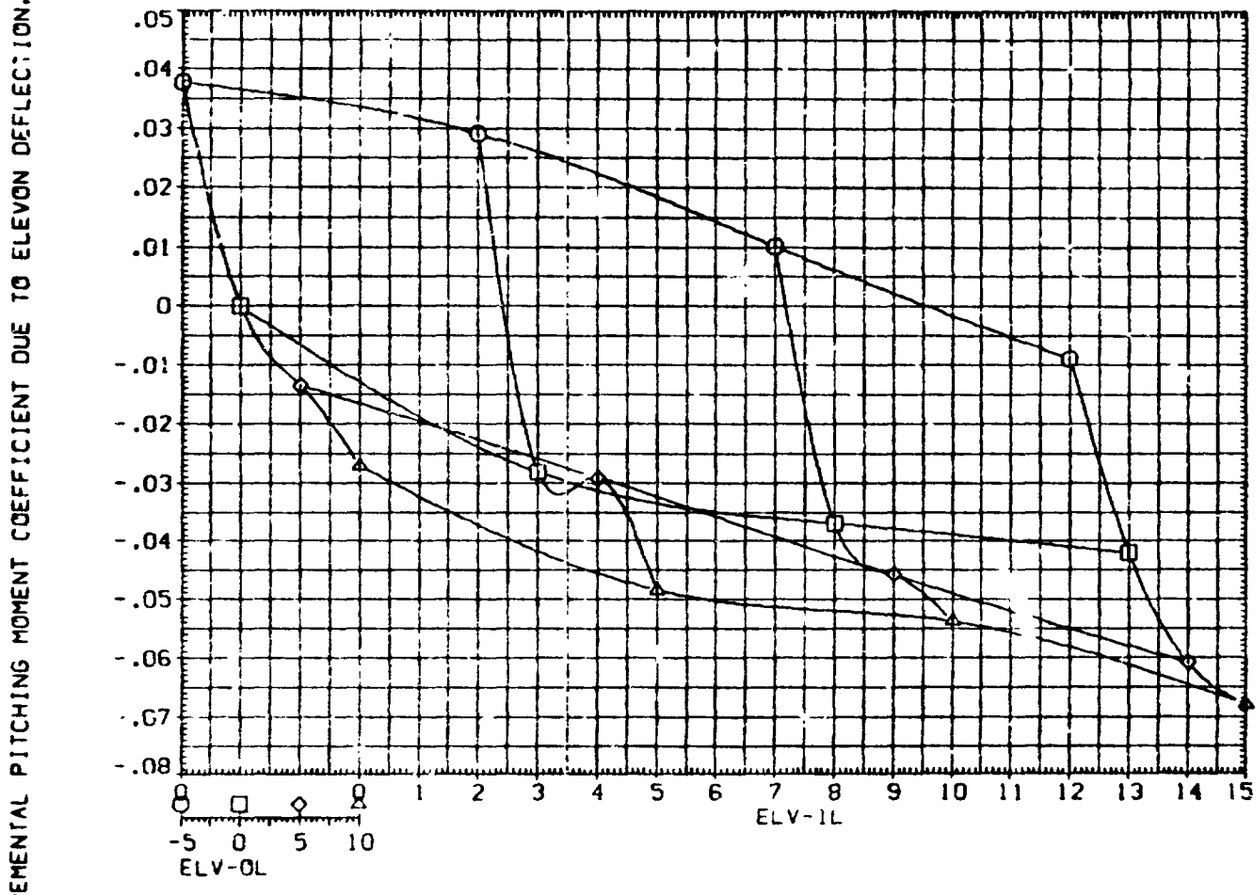
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA= 6.0 (BINBSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

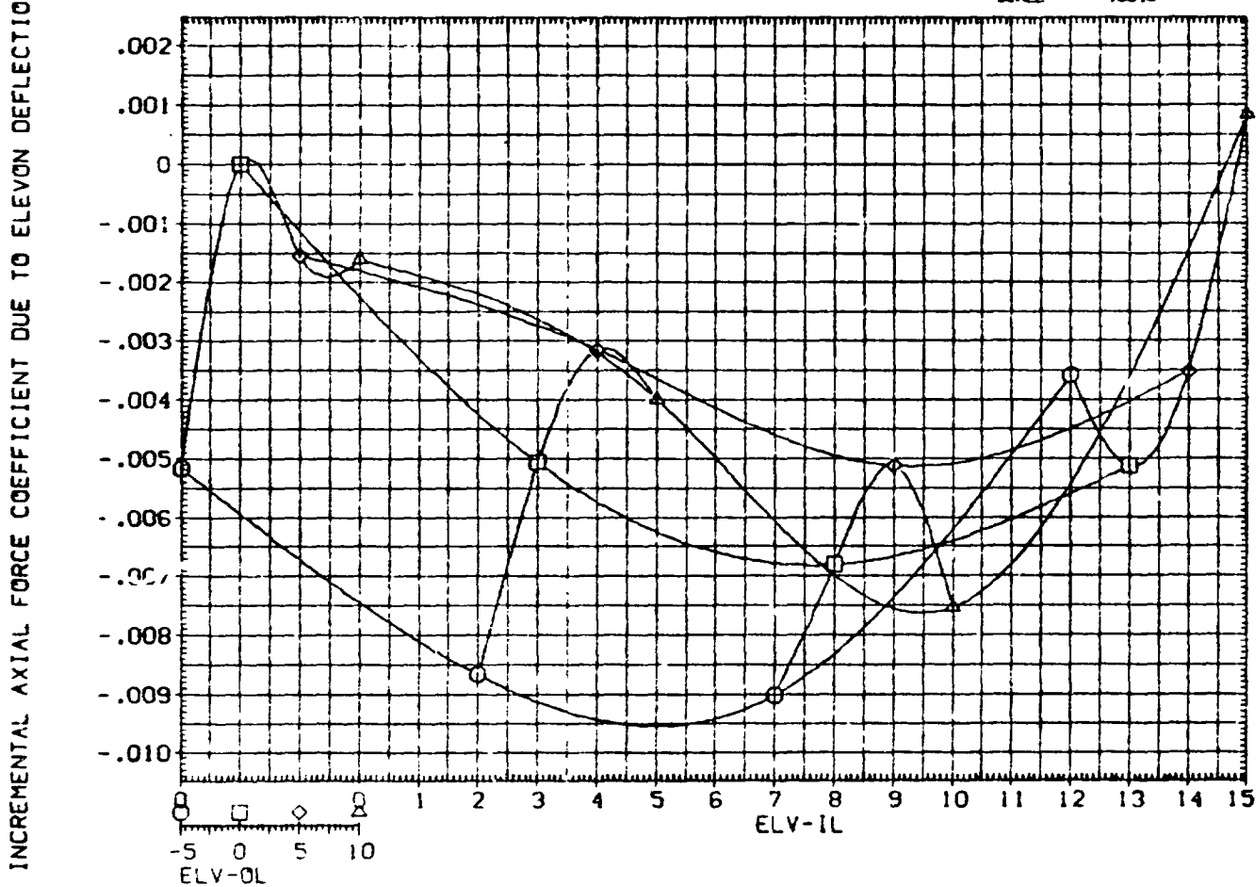
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA= 6.0 (BINBSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

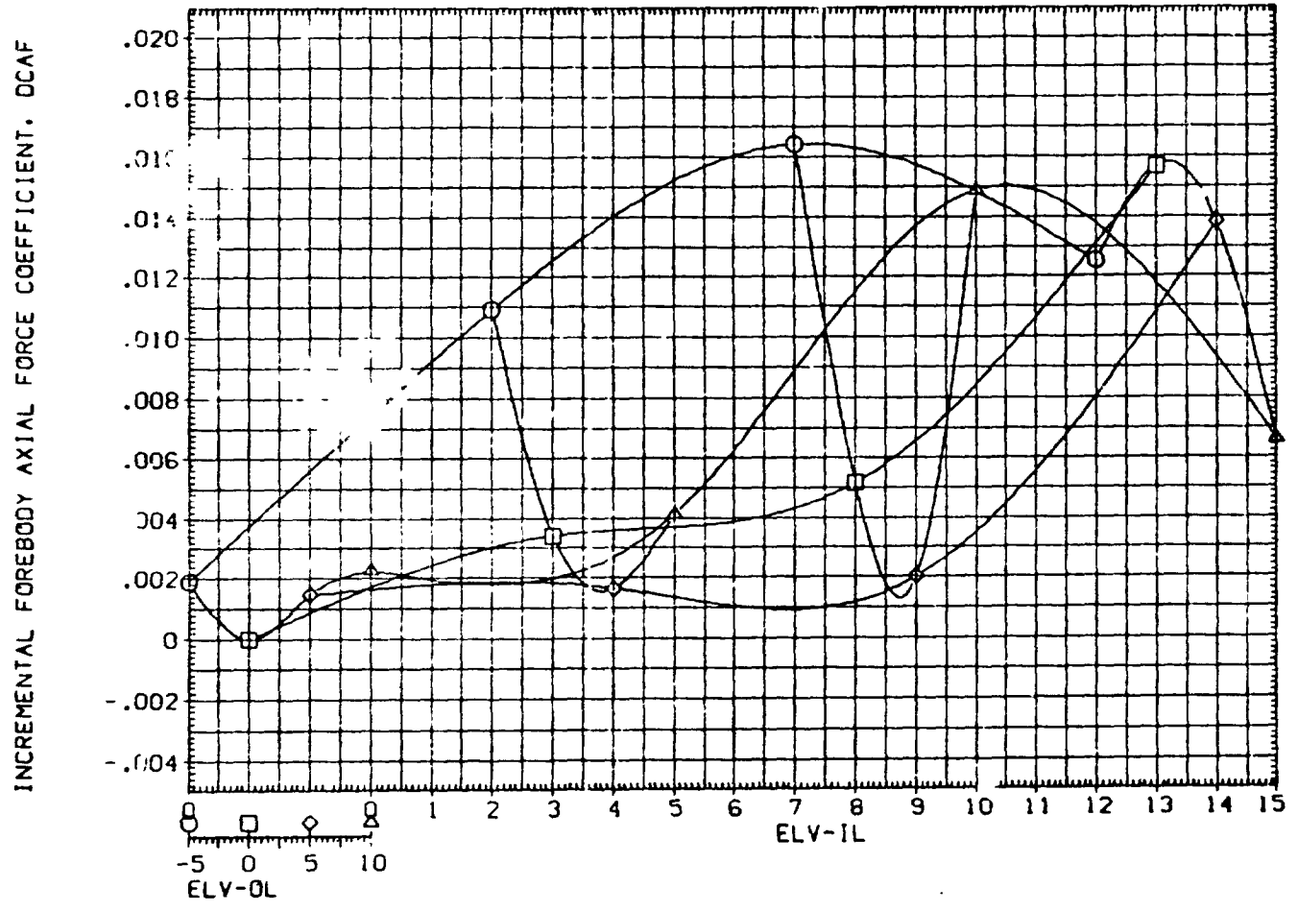
MSFC TWT 622 (IA125) 74 OTS. M= 0.6, ALPHA= 6.0 (BINBSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

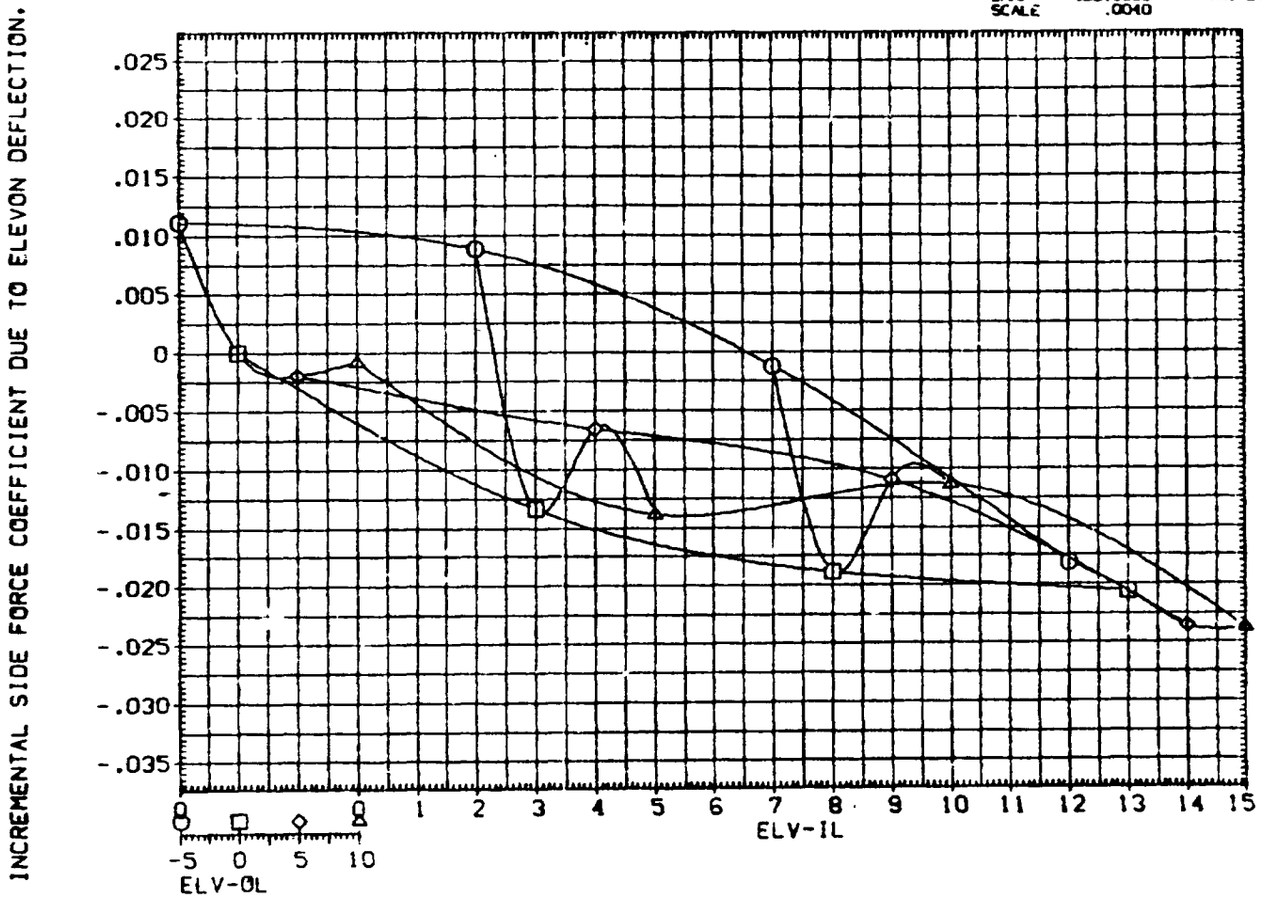
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 6.0 (BINBSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

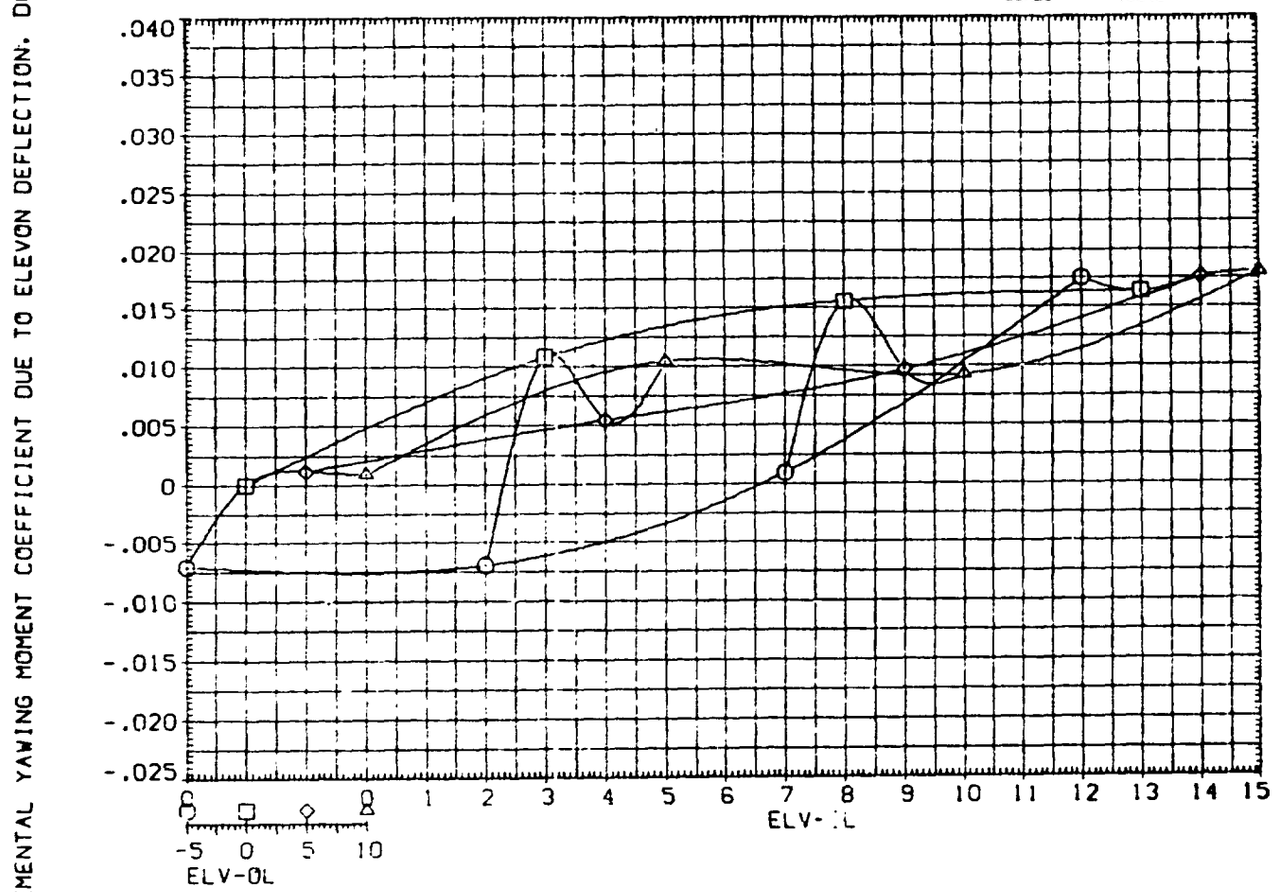
MSFC TWT 622 (:A125) 74 OTS. M= 0.6, ALPHA= 6.0 (B1NBSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

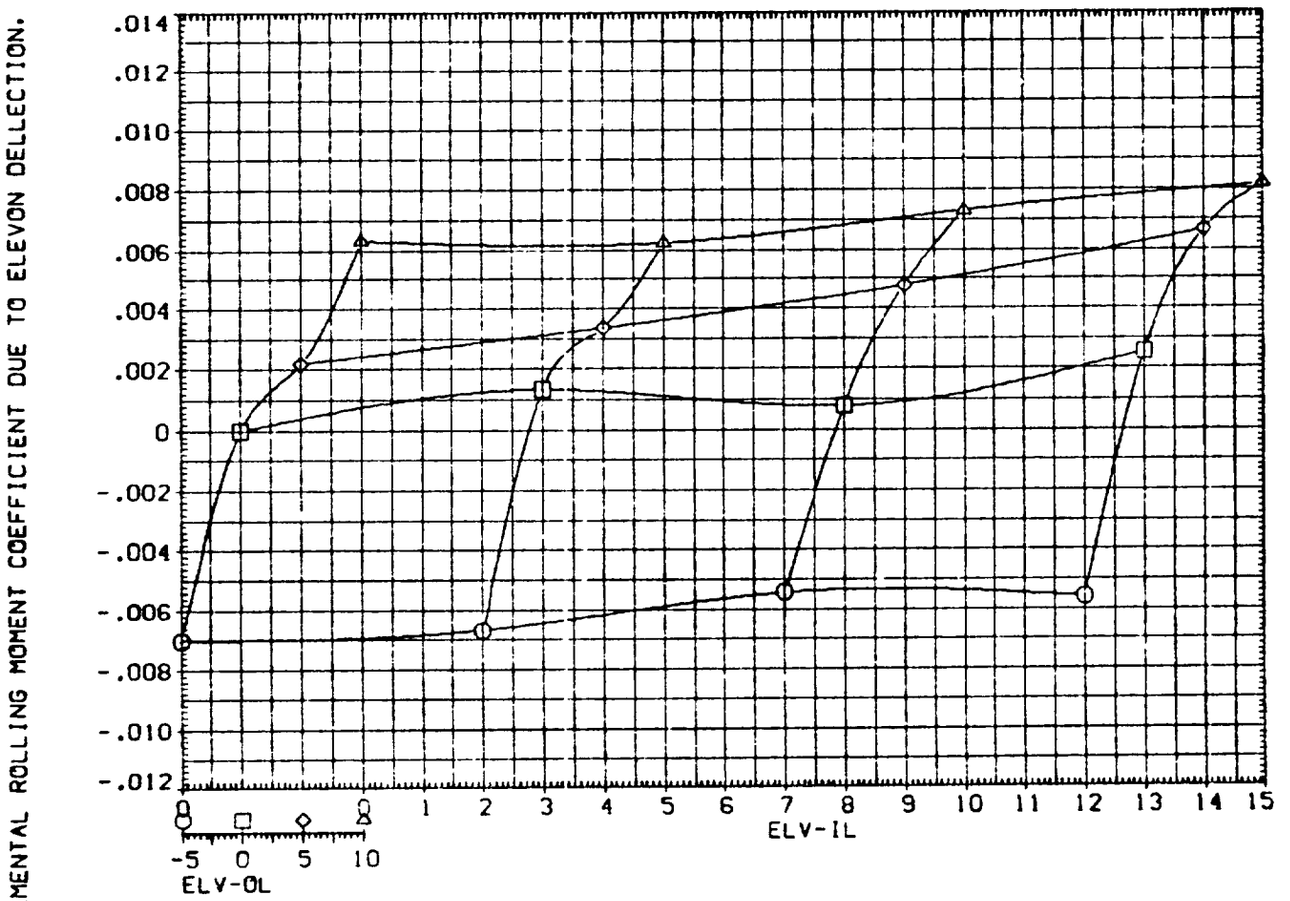
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 6.0 (BINBSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

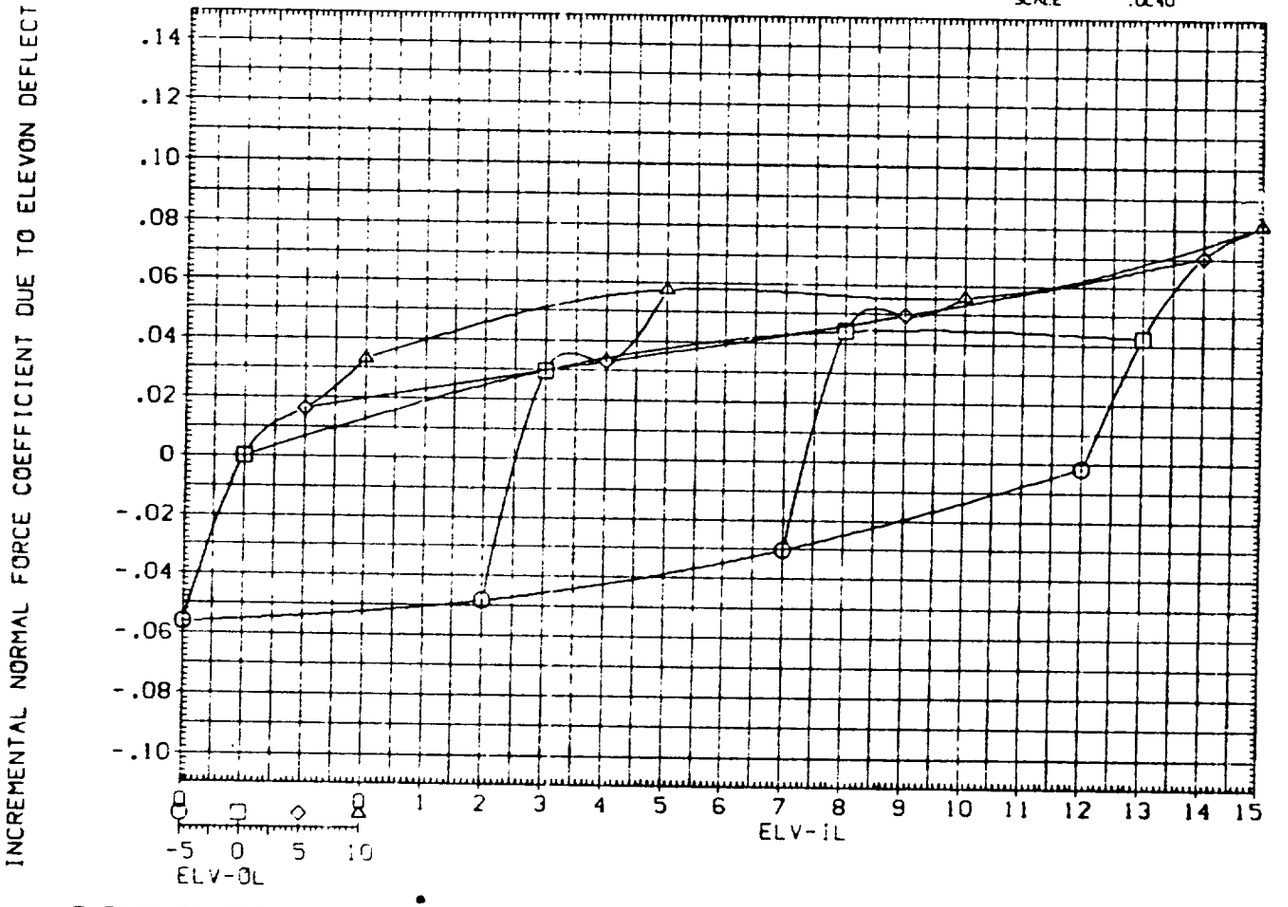
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 8.0 (BINBSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

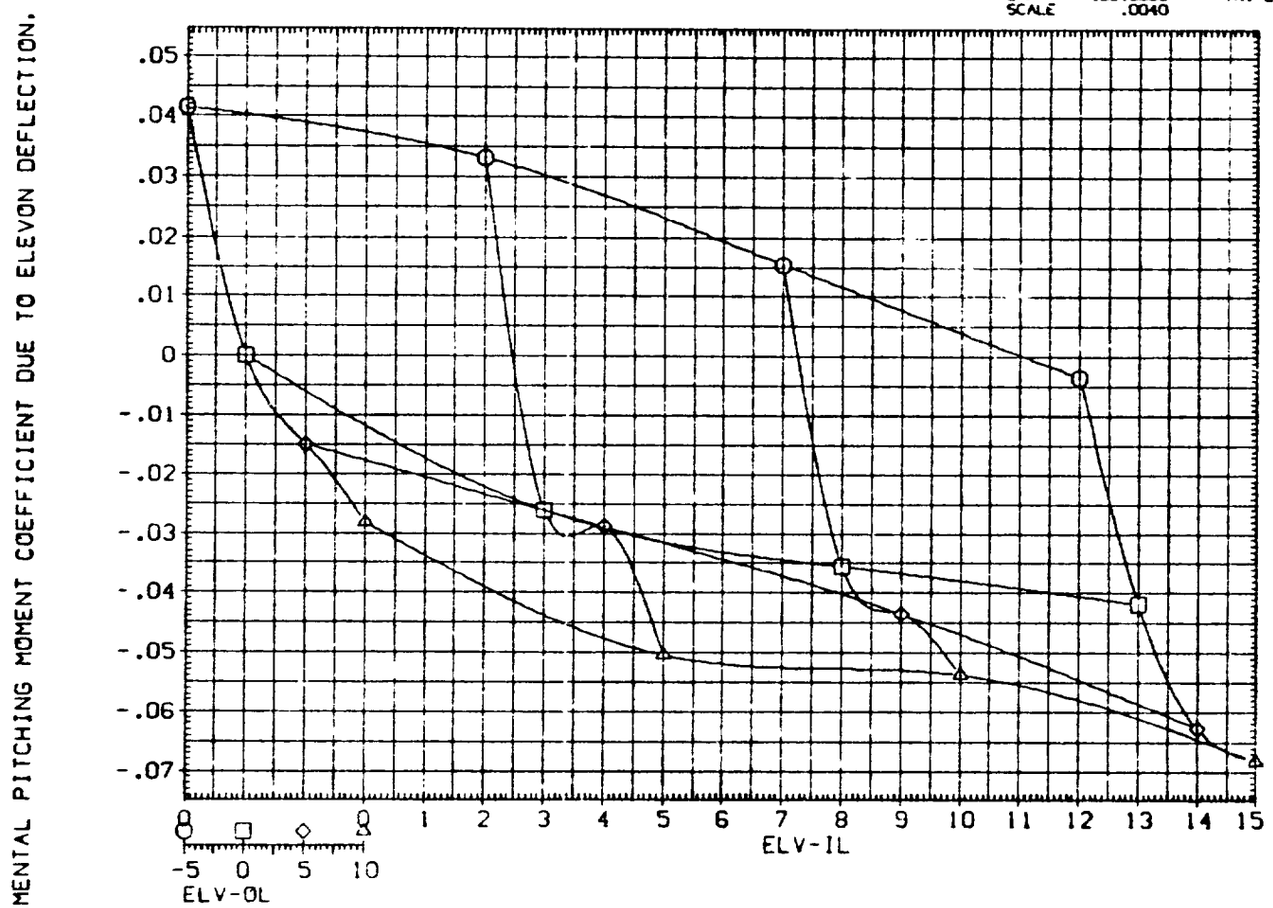
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 8.0 (BINBSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

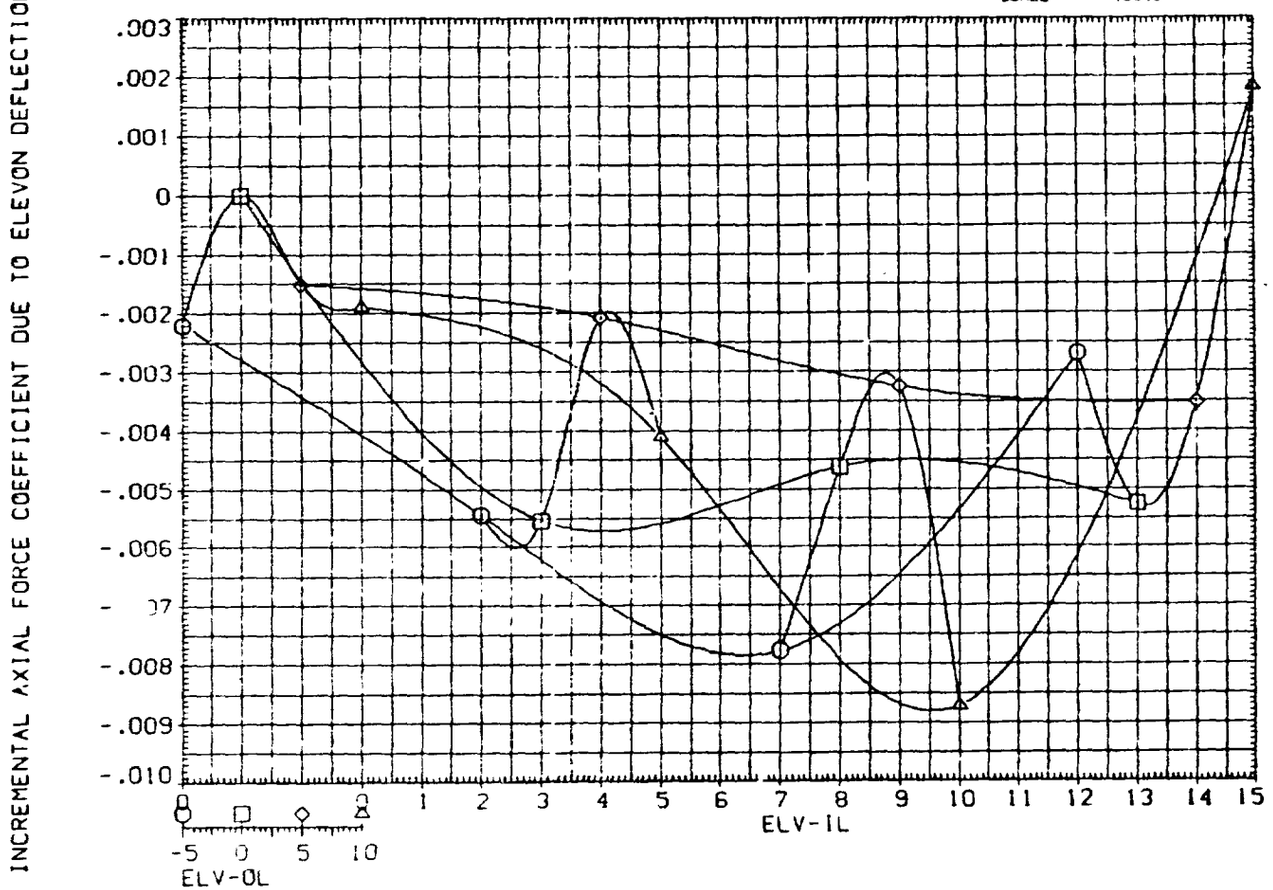
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA= 8.0 (BINBSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

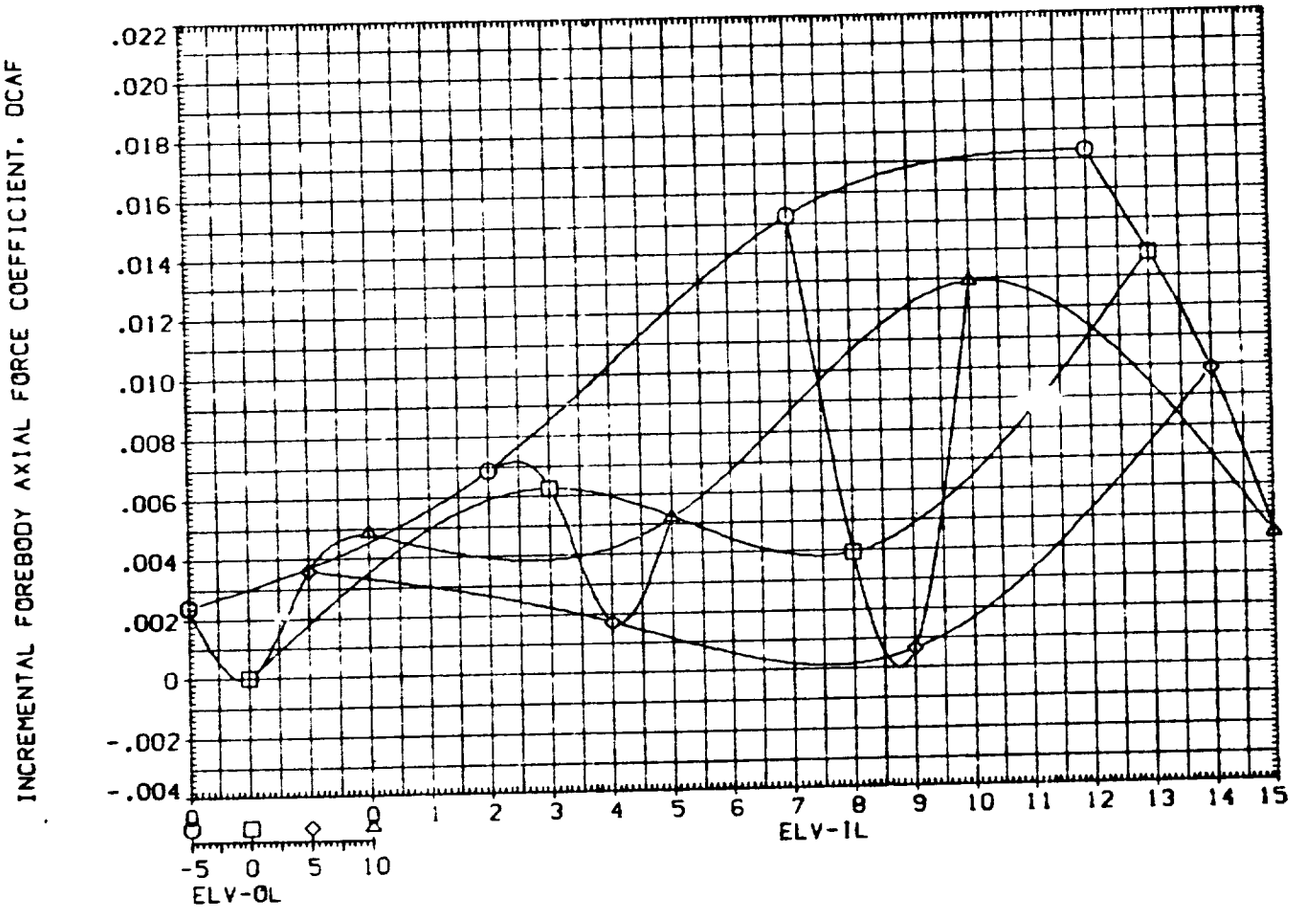
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 8.0 (B1NBSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.600	ELV-1R	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

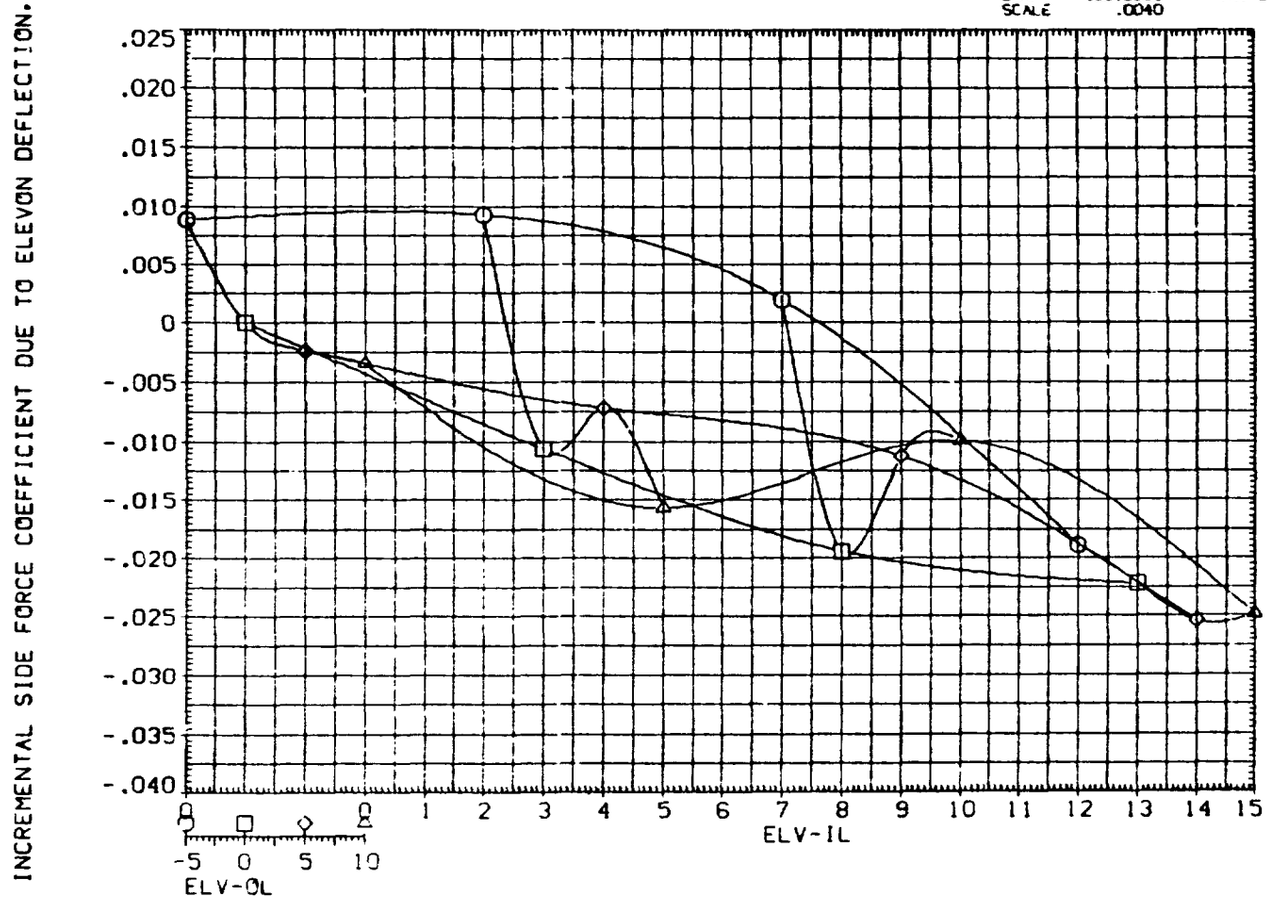
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 8.0 (B1NBSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

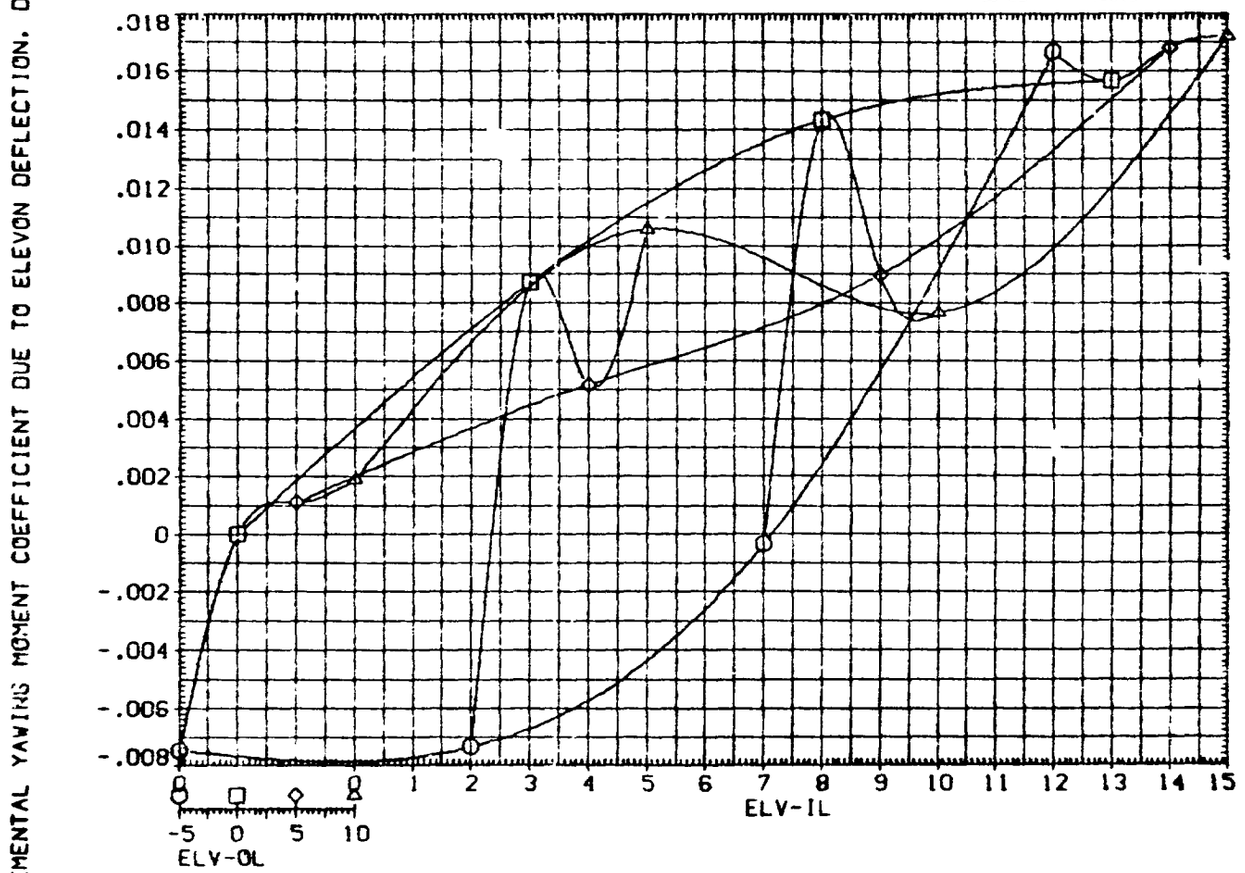
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA= 8.0 (B1NBSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

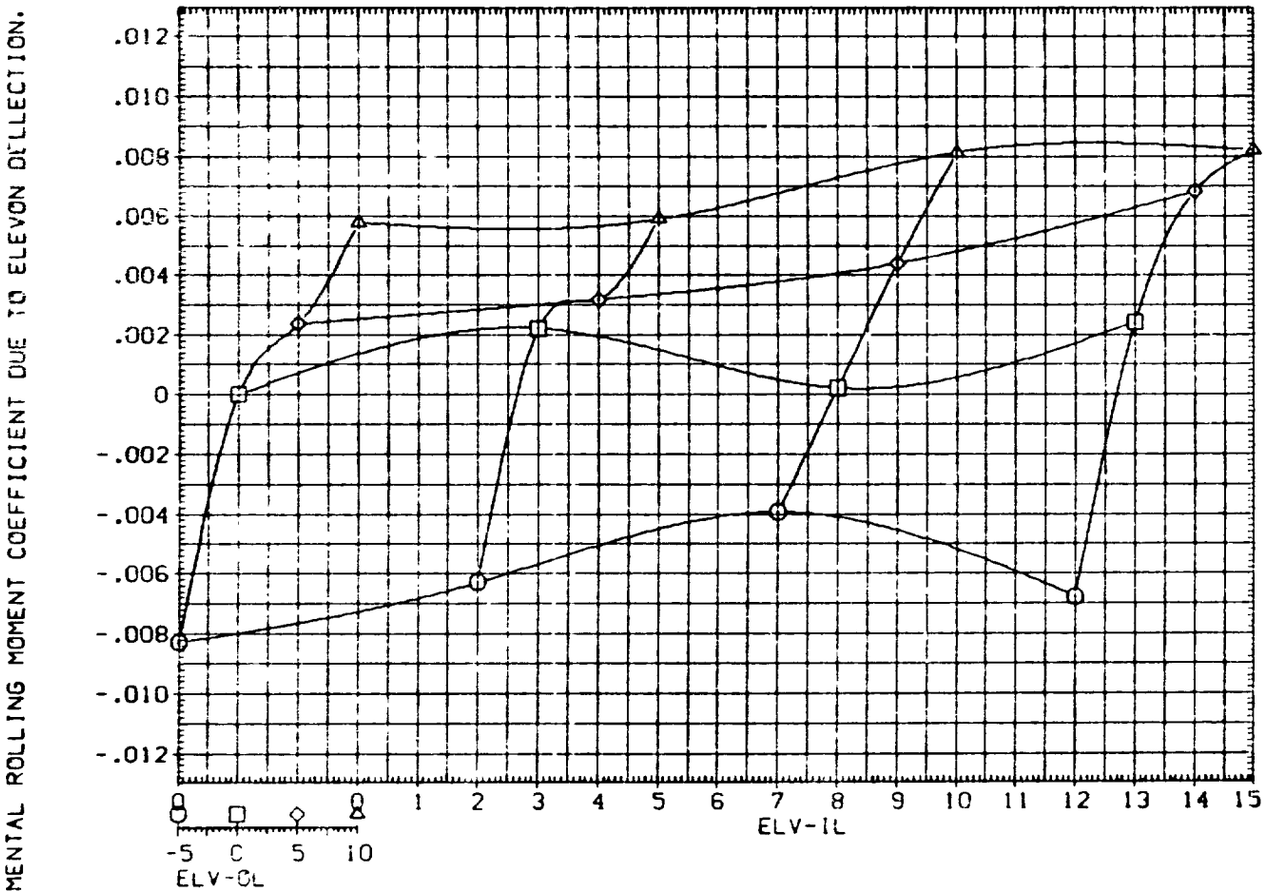
MSFC T*T 622 (IA125) 74 OTS, M= 0.6, ALPHA= 8.0 (BINBSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

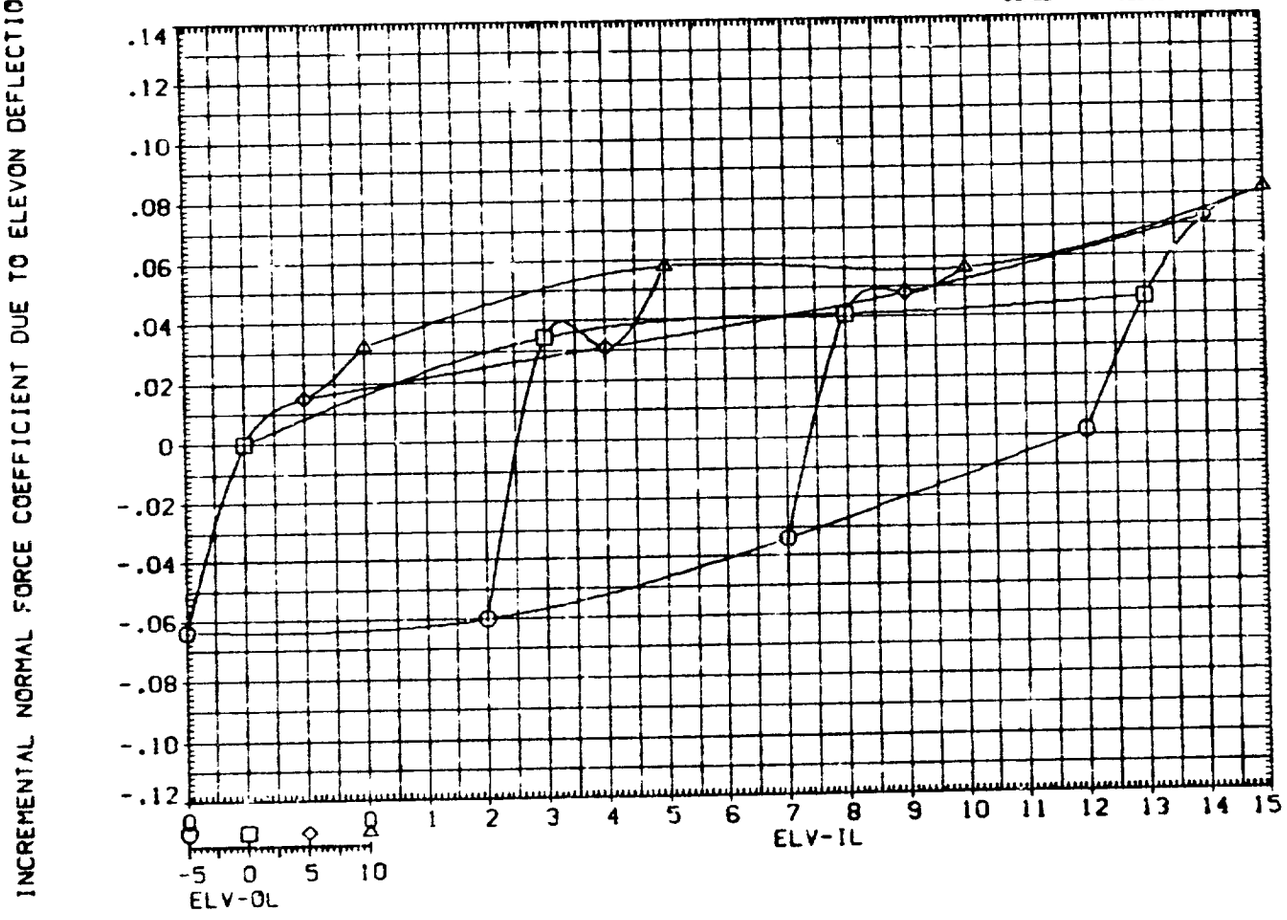
MSFC TWT 622 (IA125) 74 OTS. M= 0.6. ALPHA= 10.0(BINBSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

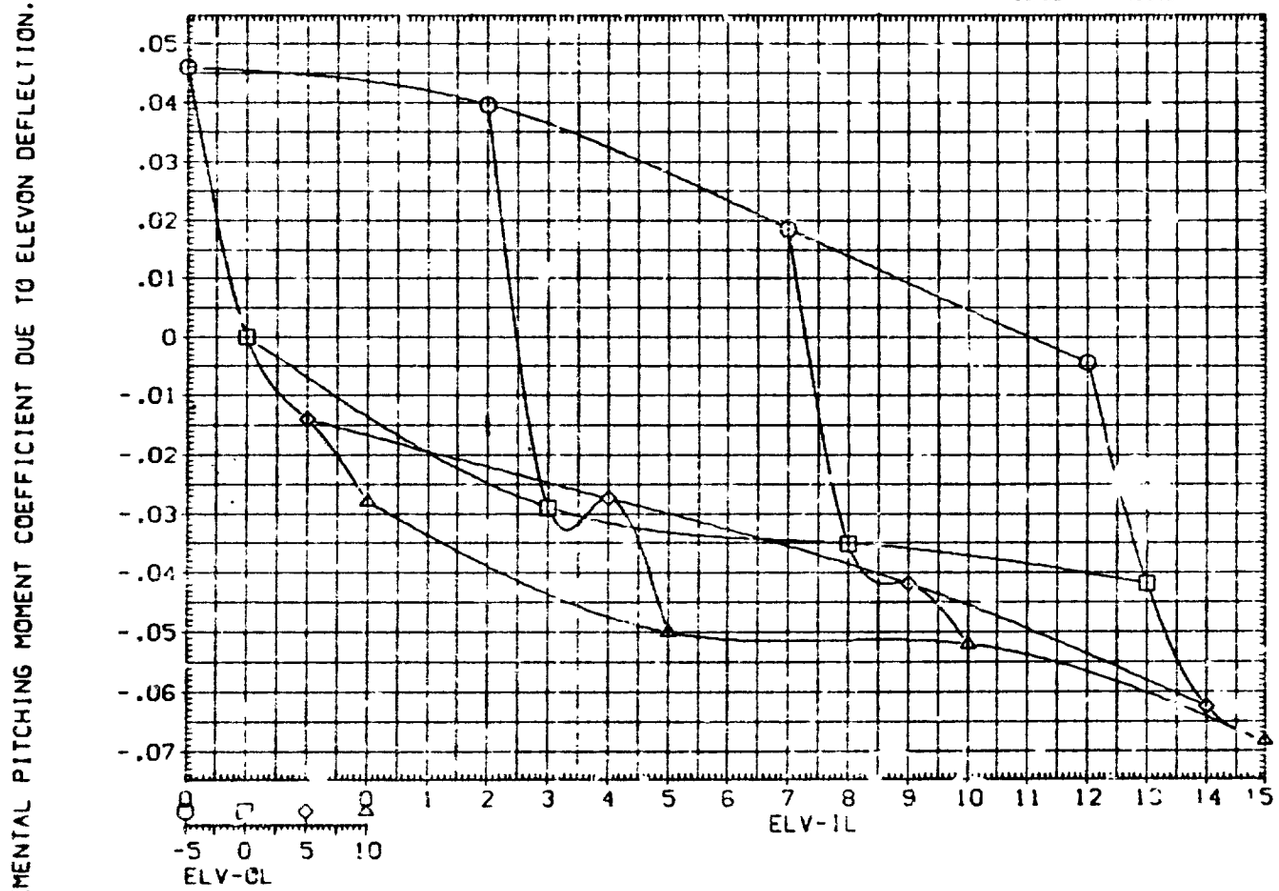
MSFC TWT 622 (IA125) 74 OTS, M= 0 6, ALPHA= 10.0(BINBSK)

PARAMETER VALUES

BETA	.000	ALPHA	10.000
MACH	.600	ELV-AR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

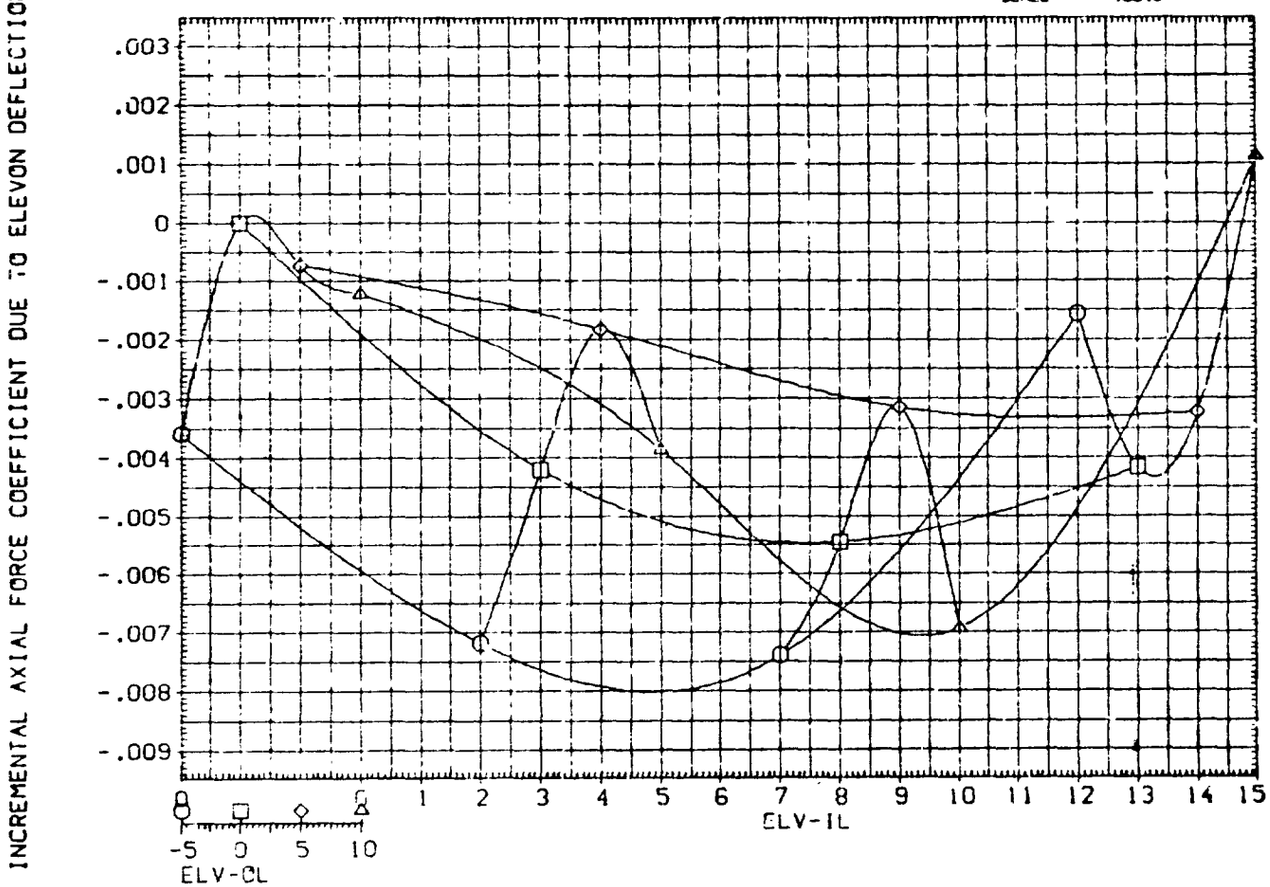
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA= 10.0(B1NBSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

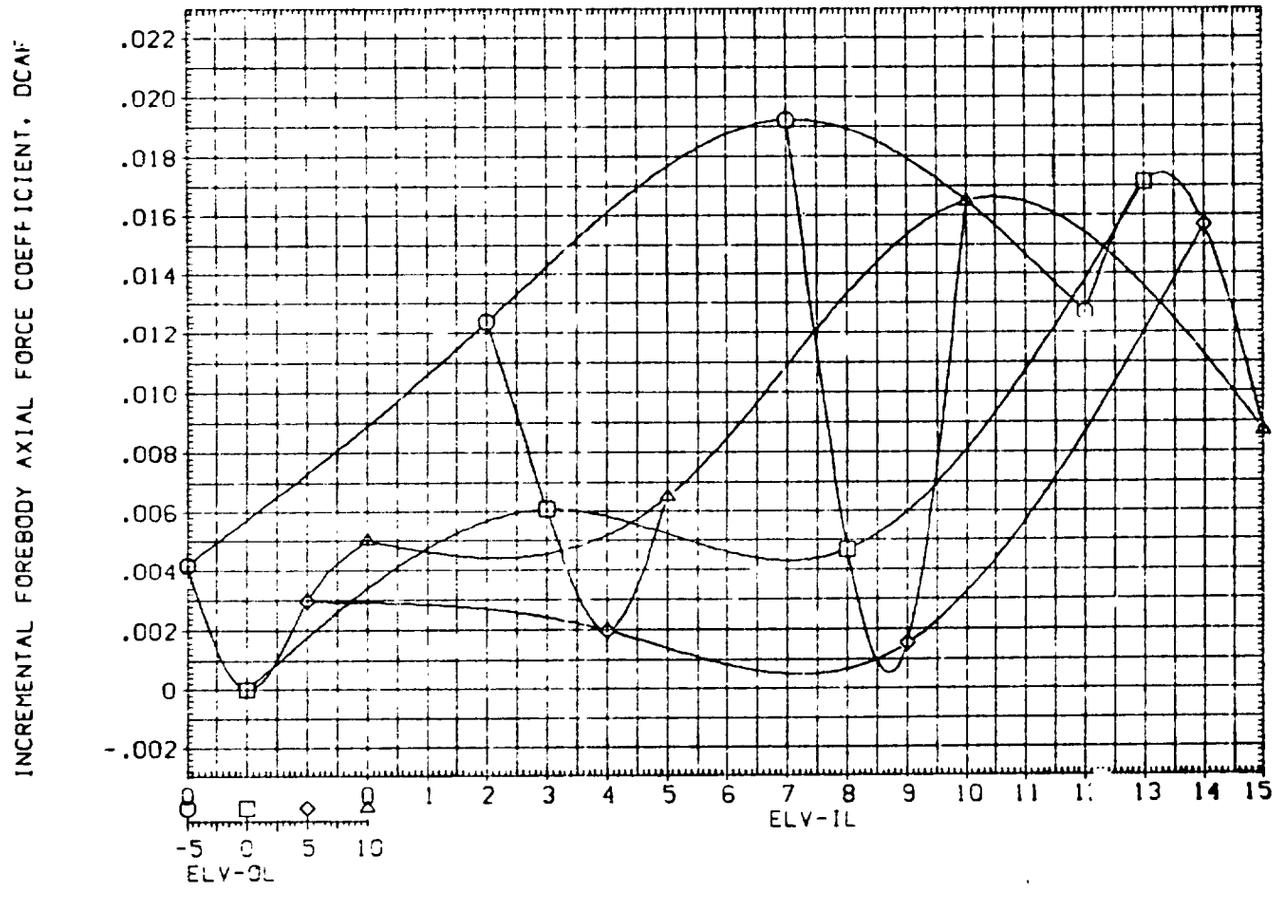
MSFC TWT 622 (IA125, 74 OTS, M= 0.6, ALPHA= 10.0(BINBSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

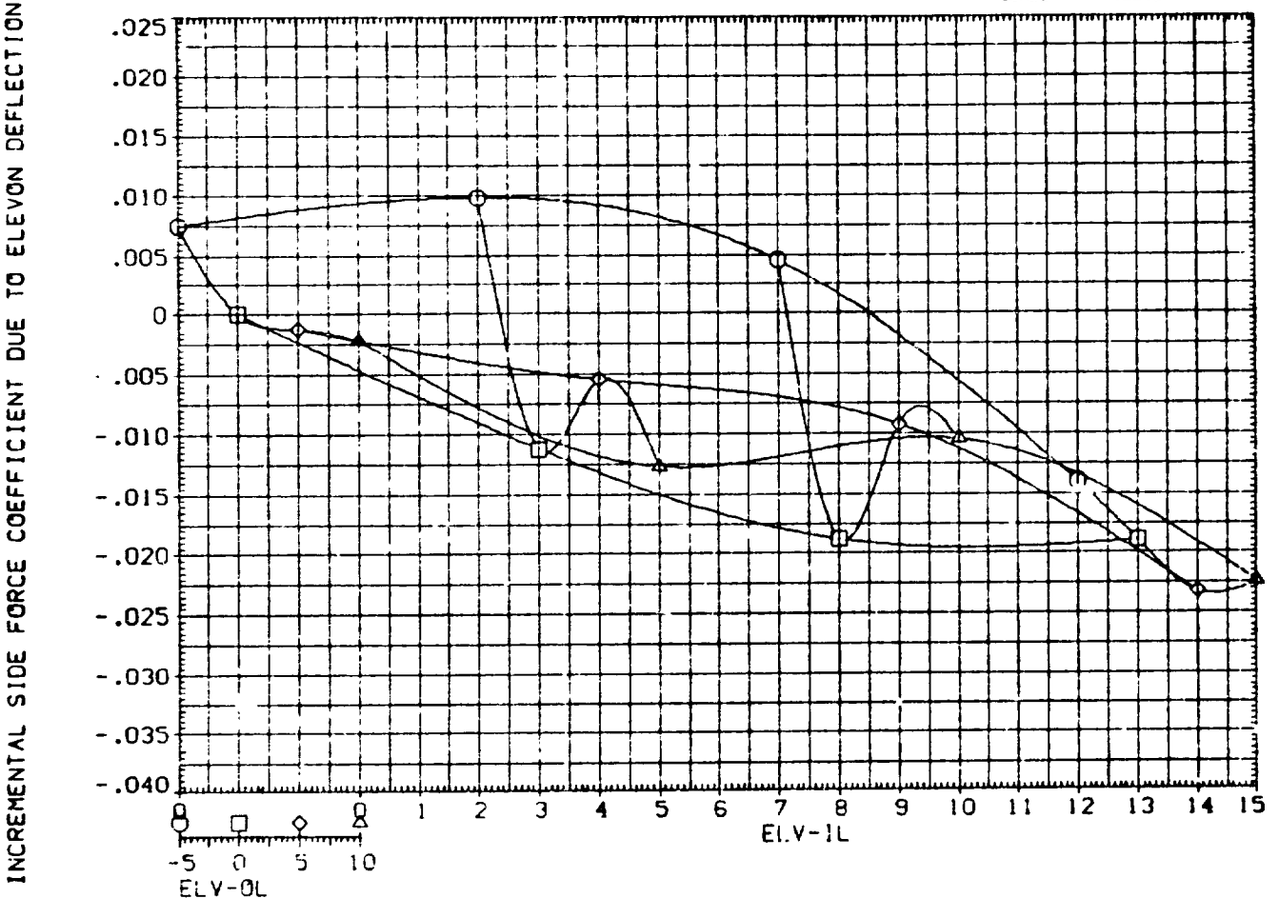
MSFC TWT 622 (IA125) 74 OTS, M= 0.6, ALPHA= 10.0(BINBSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

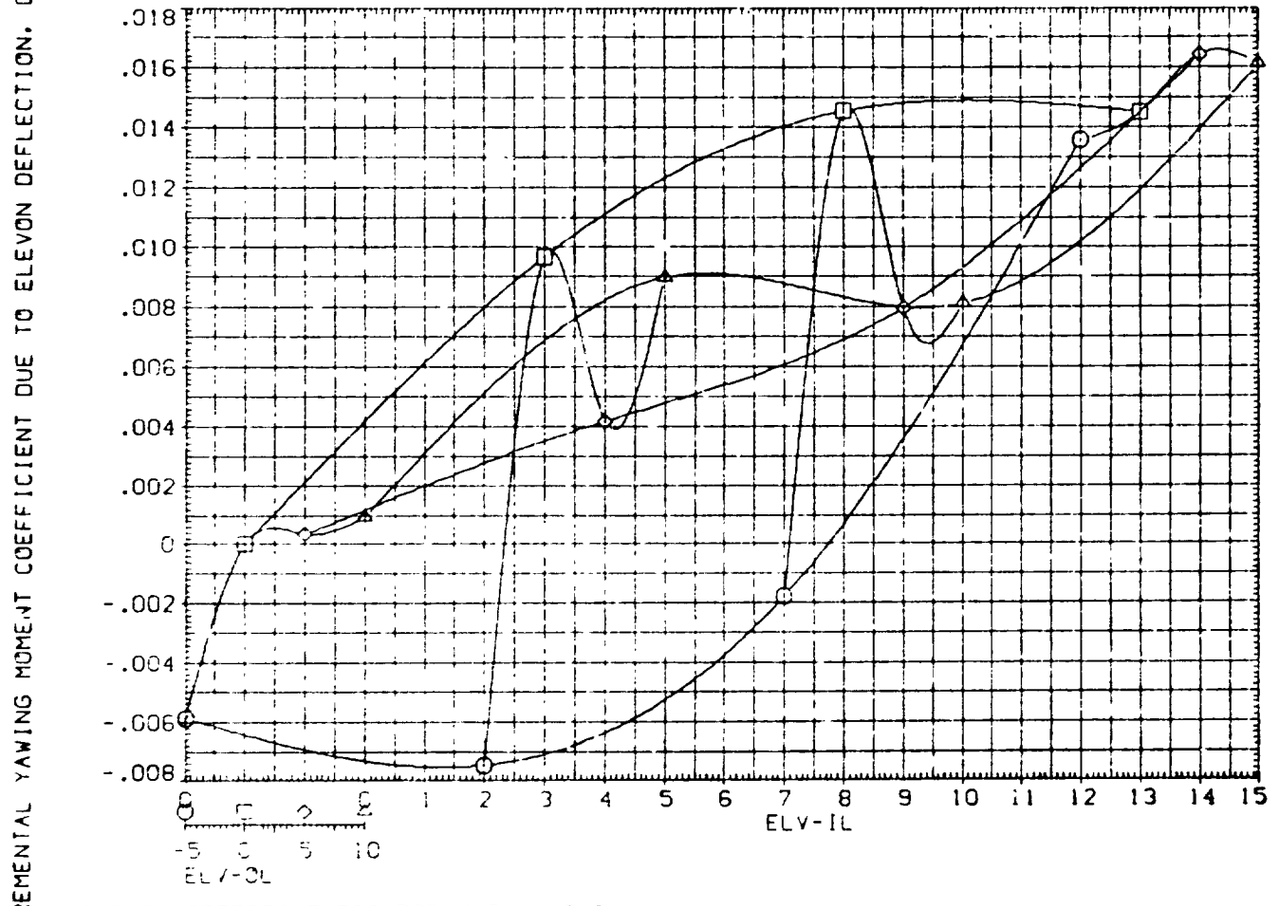
MSFC TWT 622 (IA125) 74 OTS. M= 0.6, ALPHA= 10.0(BINBSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN XT
YMRP	.0000	IN YT
ZMRP	400.0000	IN ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

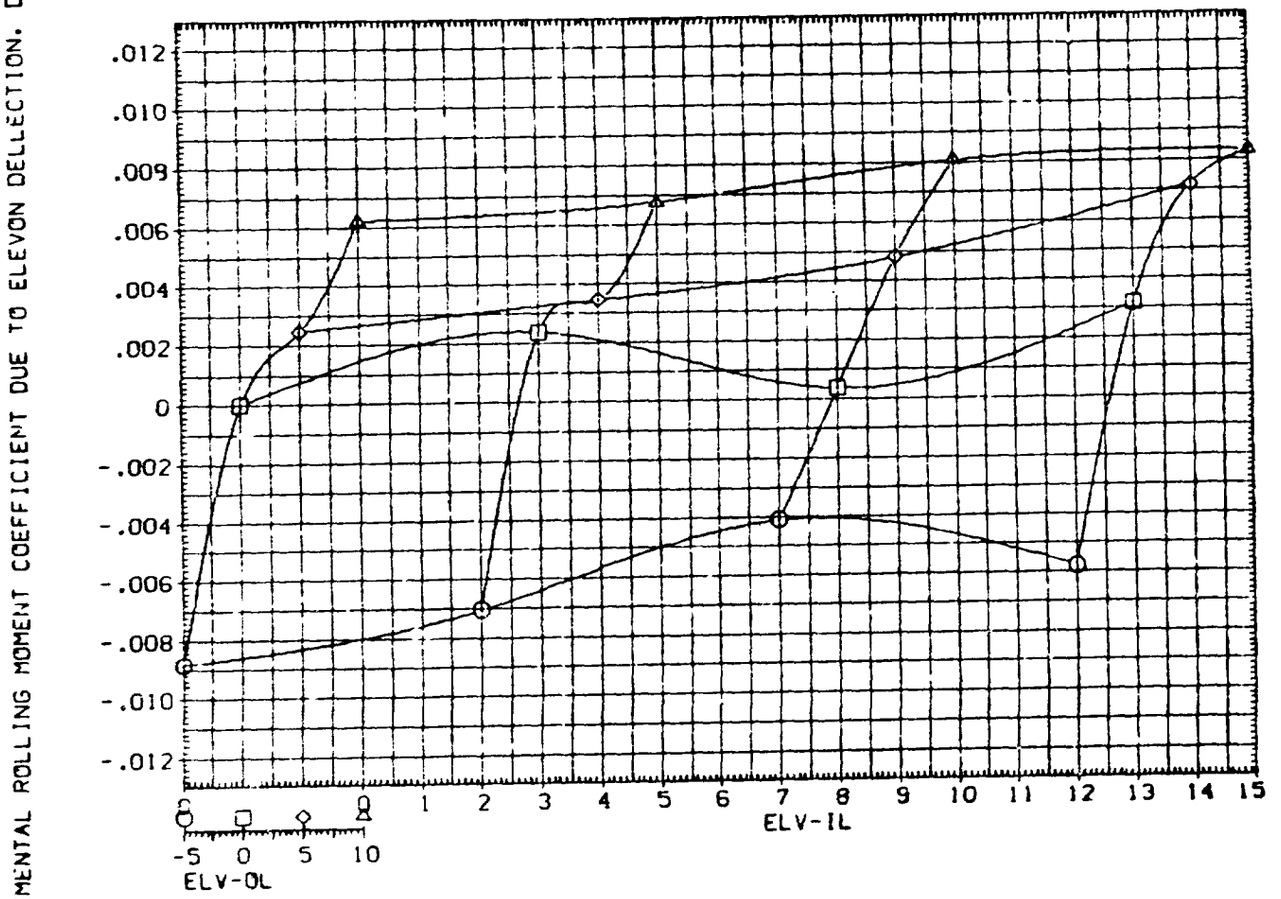
MSFC TWT 622 (IA125) 74 OTS. M= 0.6, ALPHA= 10.0(BINBSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.600	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.6

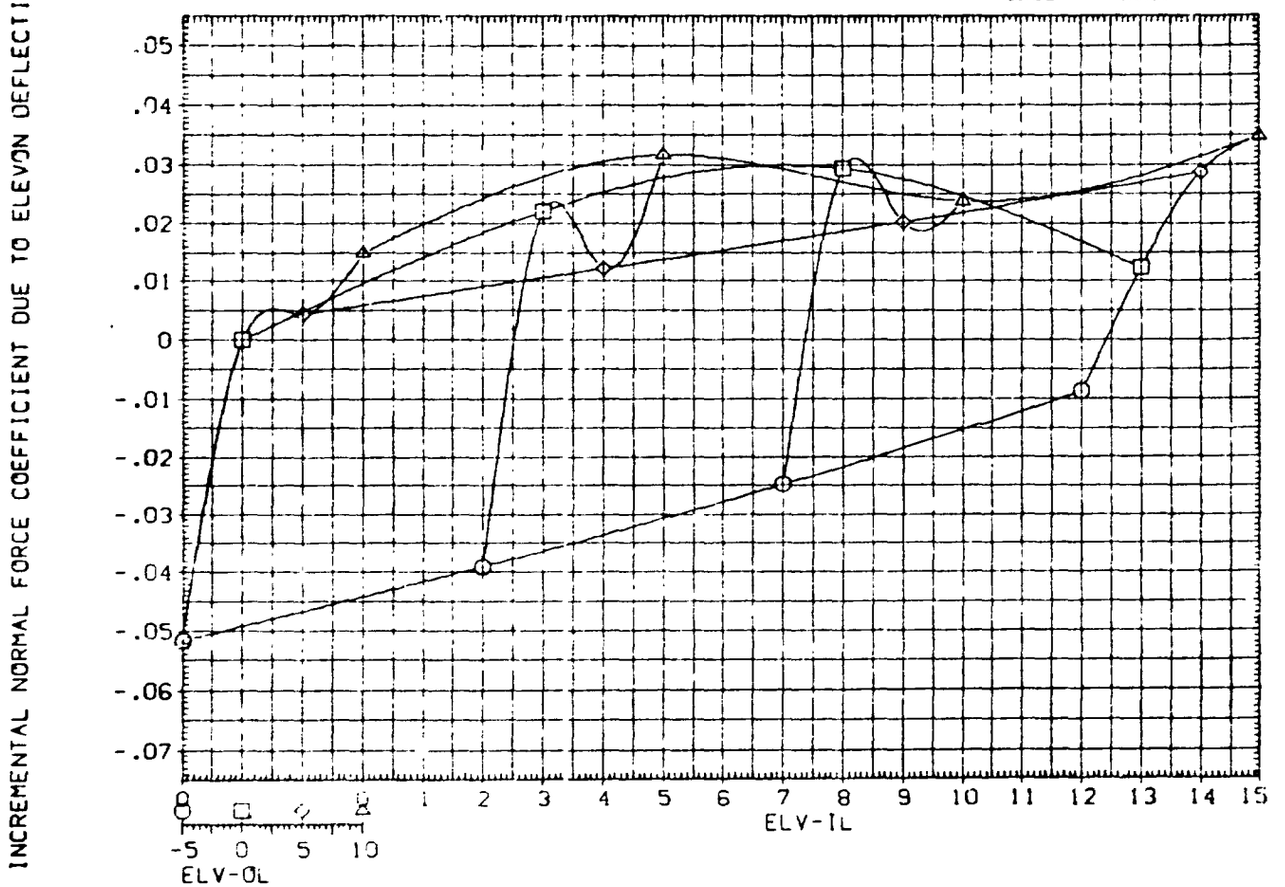
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-10.0(BINCSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2694.0000	SQ. FT
LREF	1296.0000	INCHES
BREF	1296.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

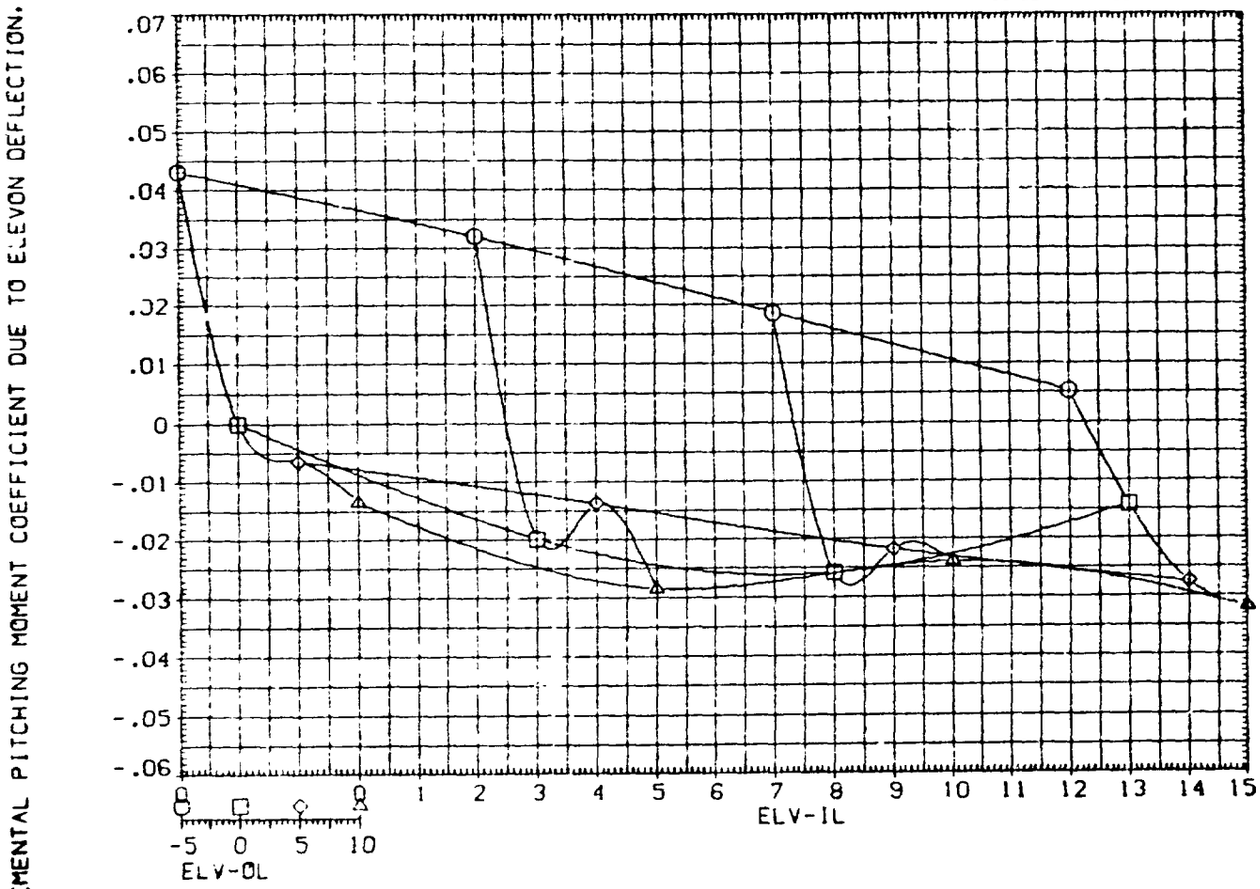
MSFC TWT 622 (IA125) 74 OTS. M= 0.9, ALPHA=-10.0(BINCSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

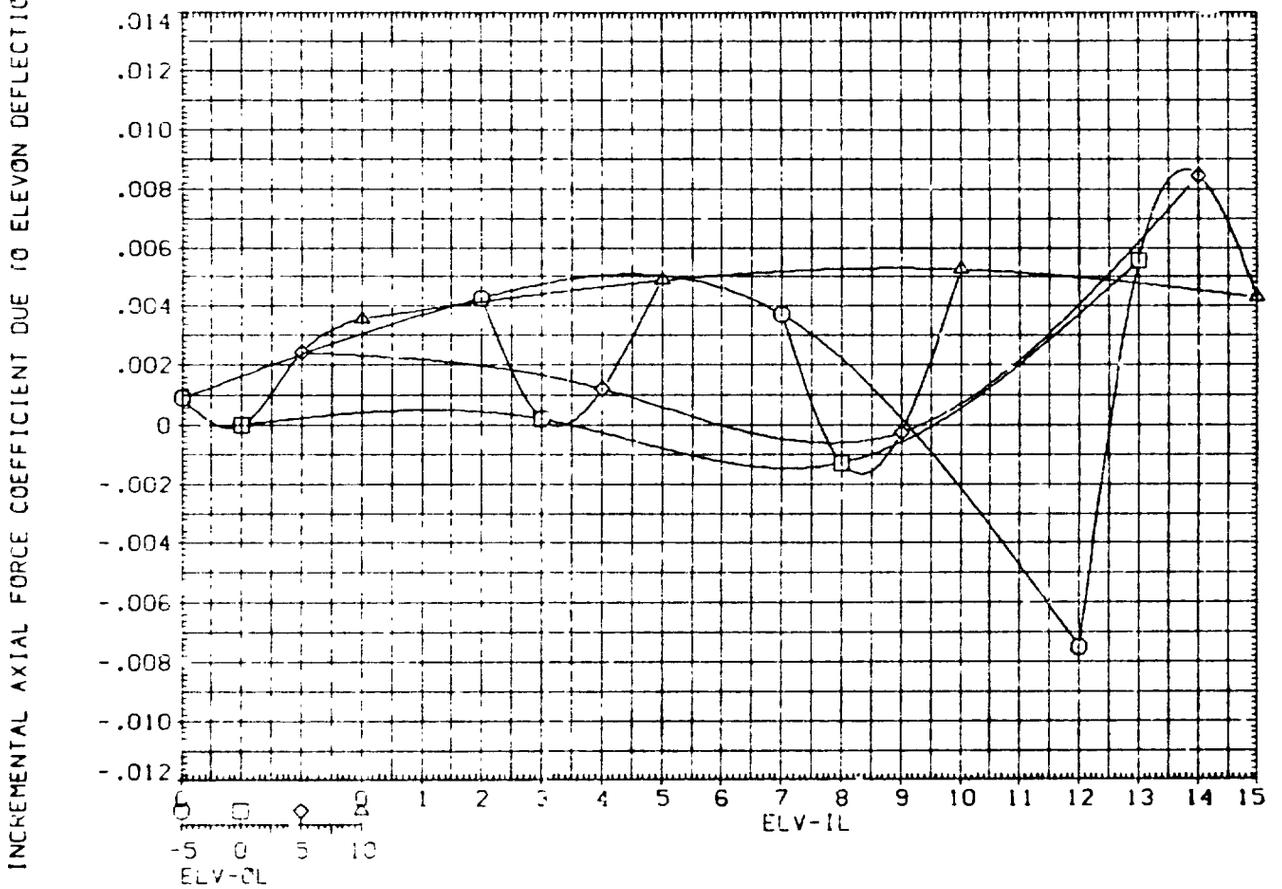
MSFC TWT 622 (A:.5, 74 O'S. M= 0.9. ALPHA=-10.0(BINCSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

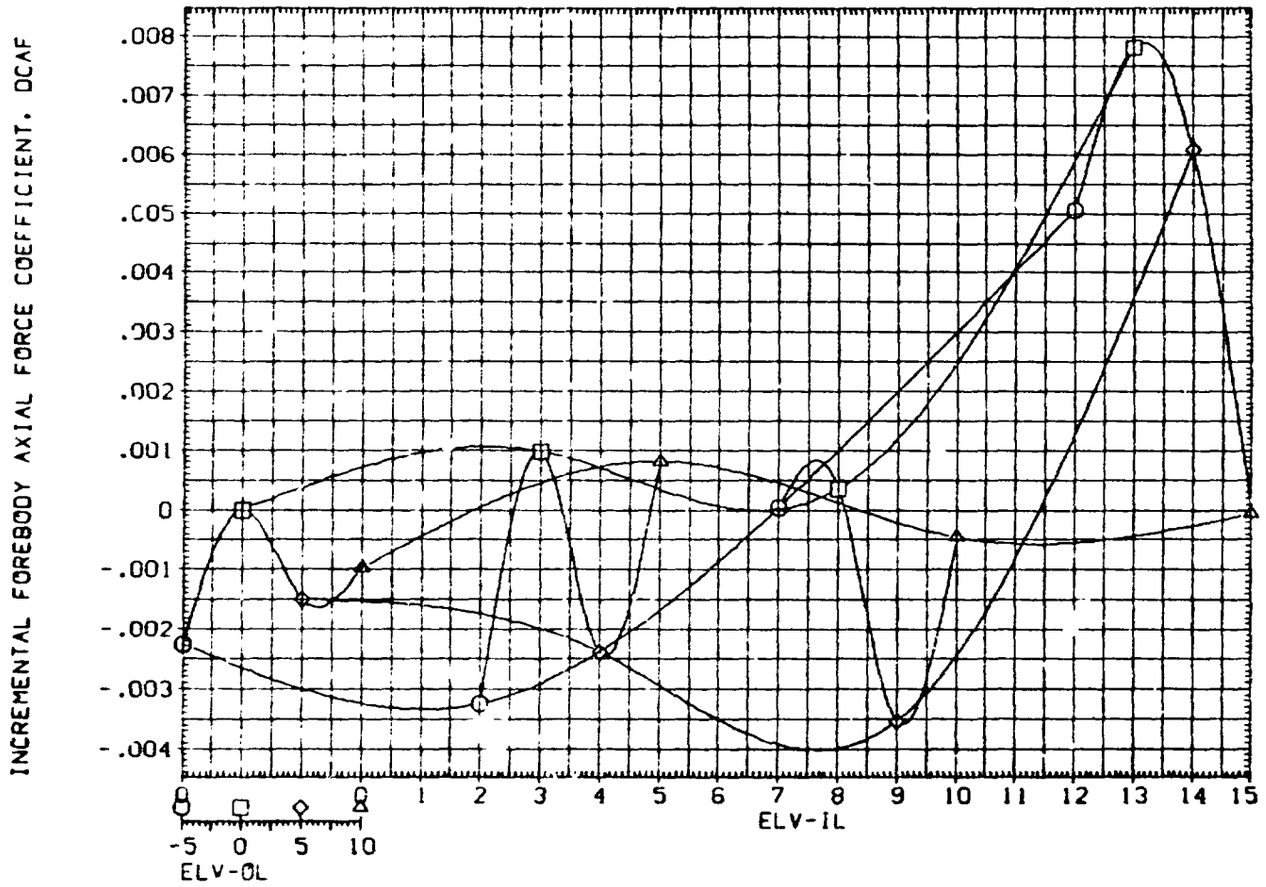
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-10.0(B1NCSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

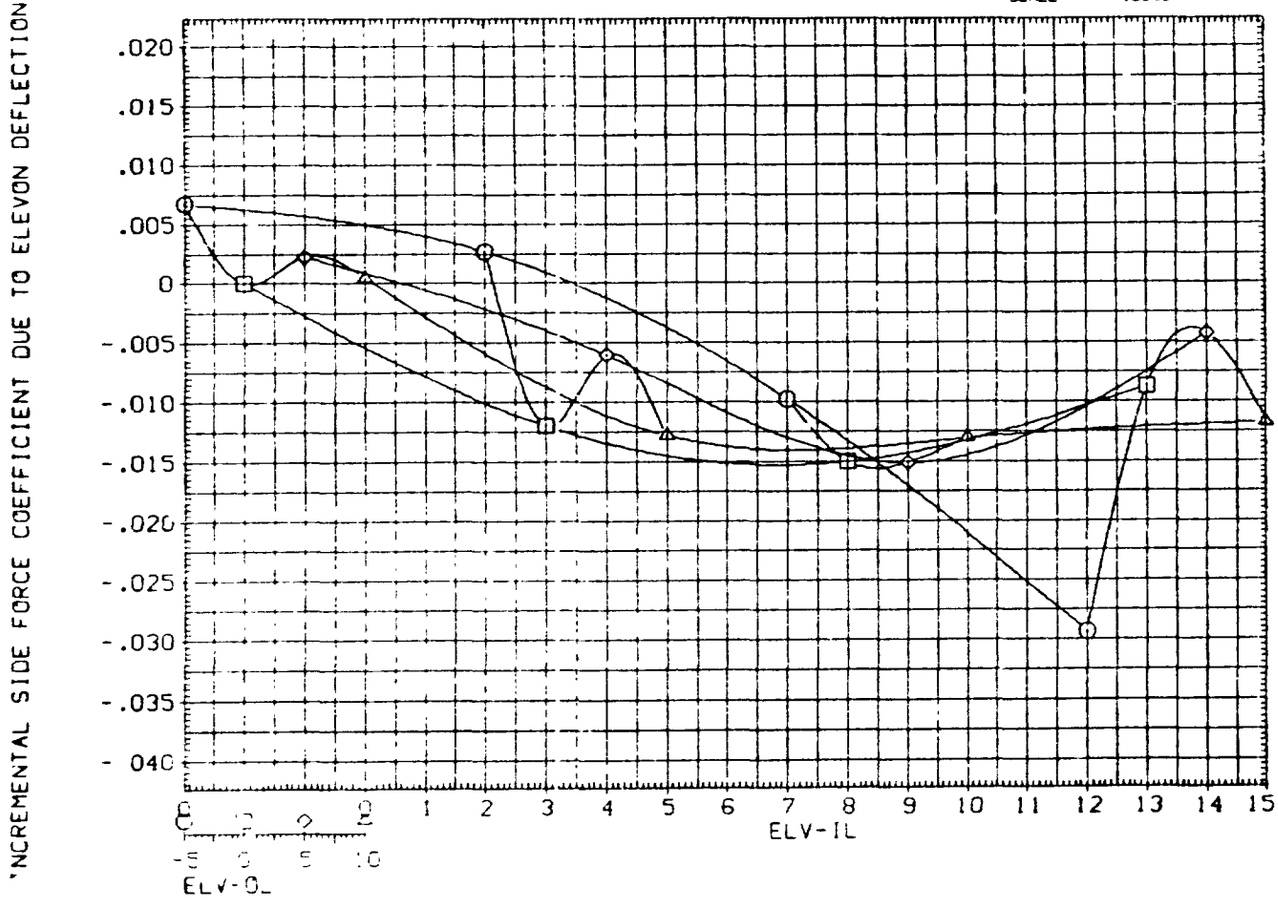
MSFC TM 622 (IA125) 74 OTS. M= 0.9. ALPHA=-10.0(BINCSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3100	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

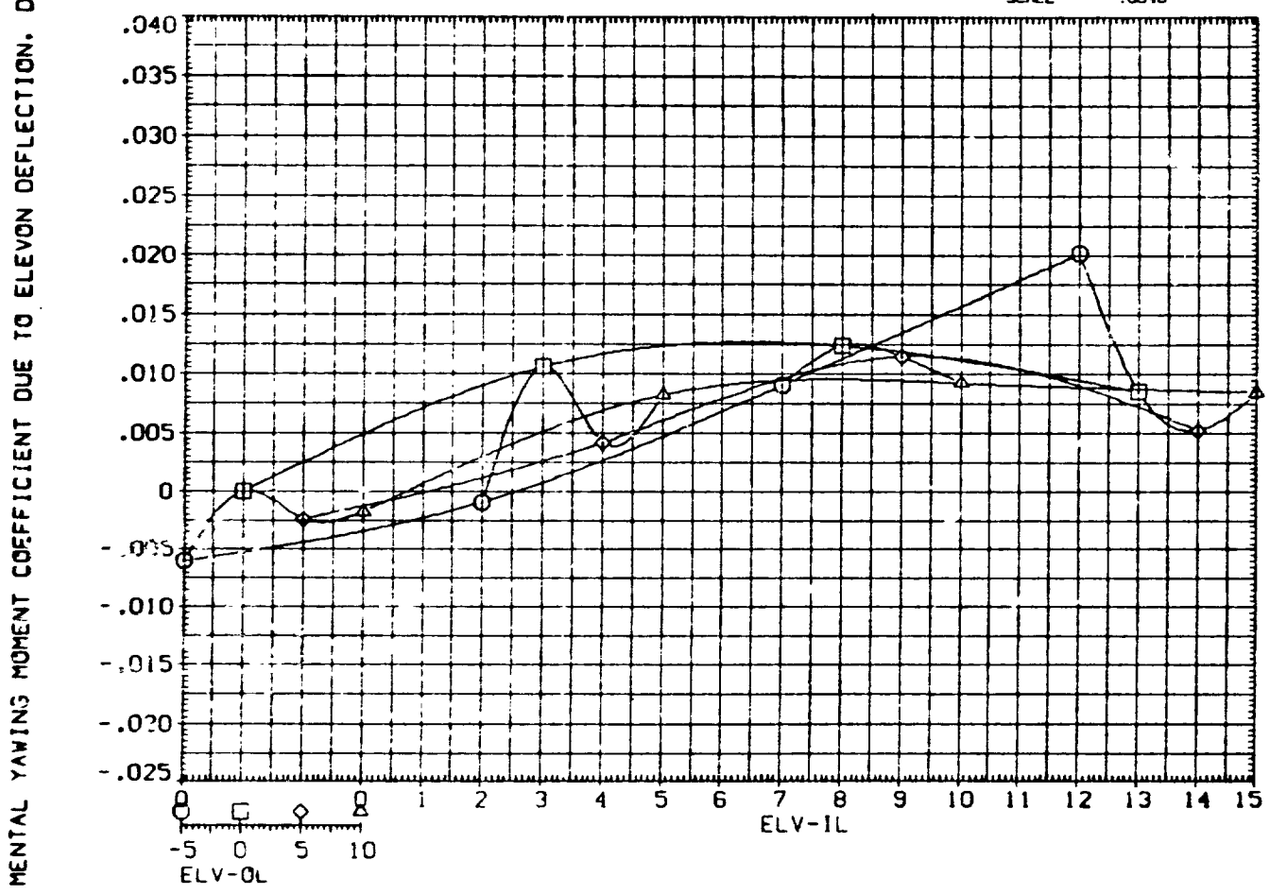
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA=-10.0(B1NCSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.900	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1250.3000	INCHES
BREF	1250.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

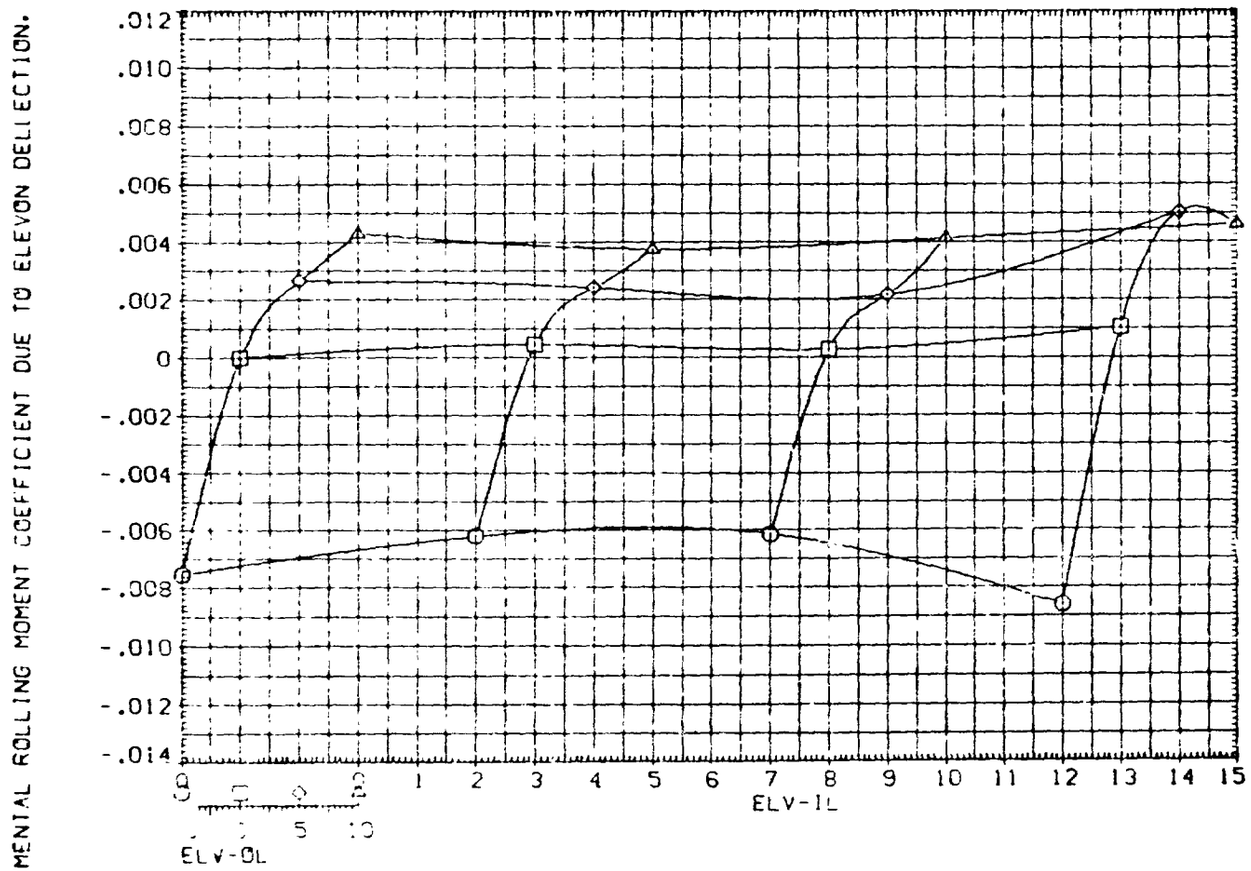
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-10.0(BINCSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN XT
YMRP	.0000	IN YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

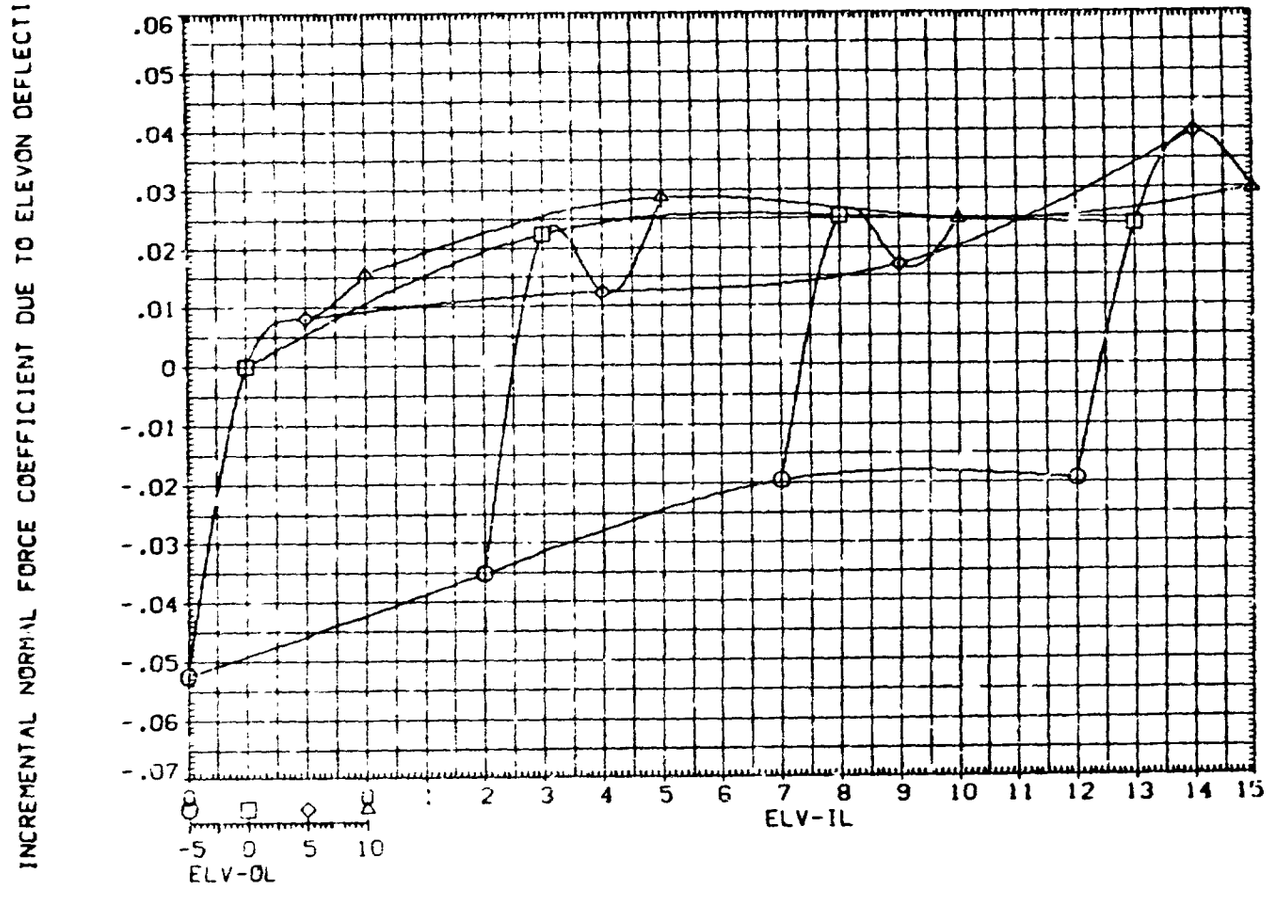
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-8.0 (BINCSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.900	ELV-IR	.000
ELV-OR	000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

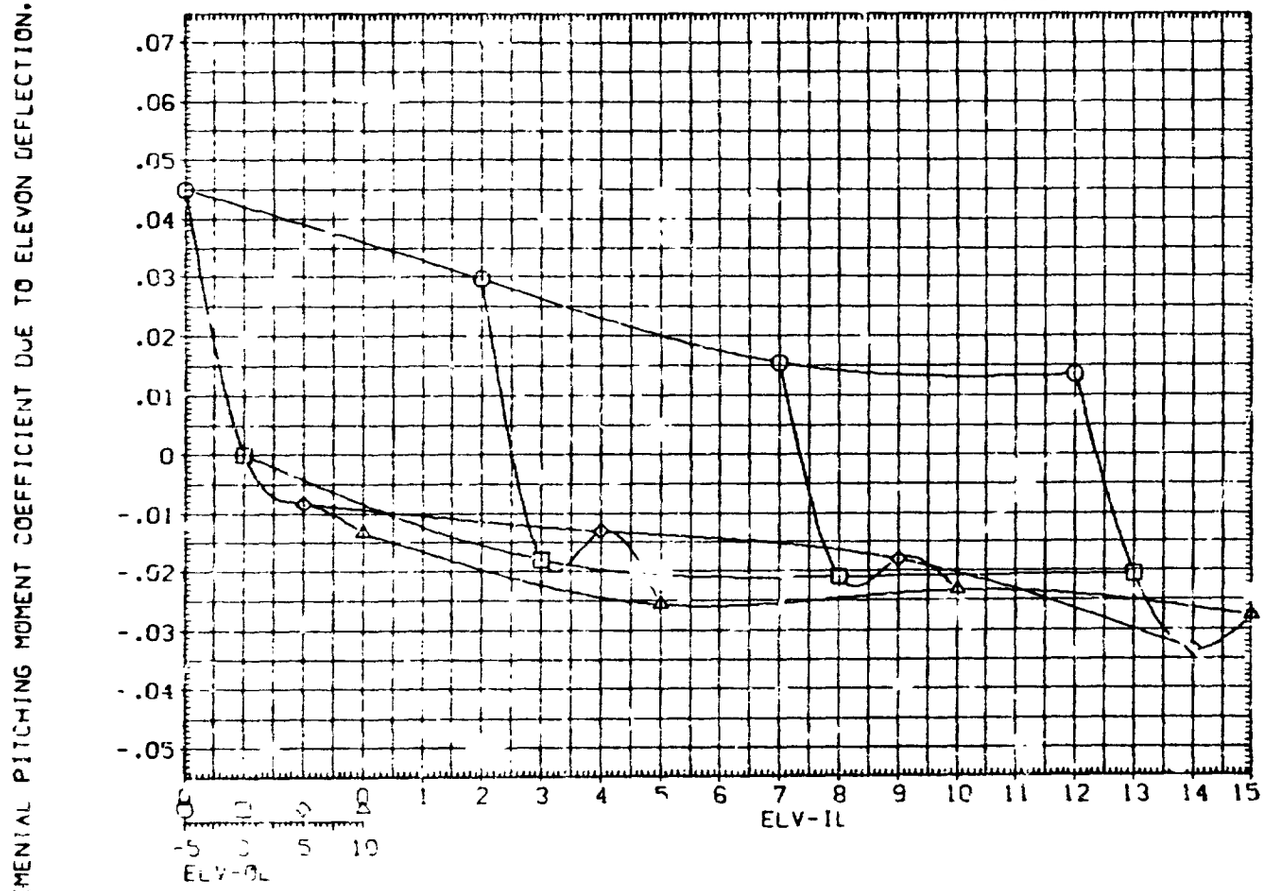
MSFC T*T 622 (*A!25) 74 OTS, M= 0.9, ALPHA=-8.0 (BINCSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.900	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

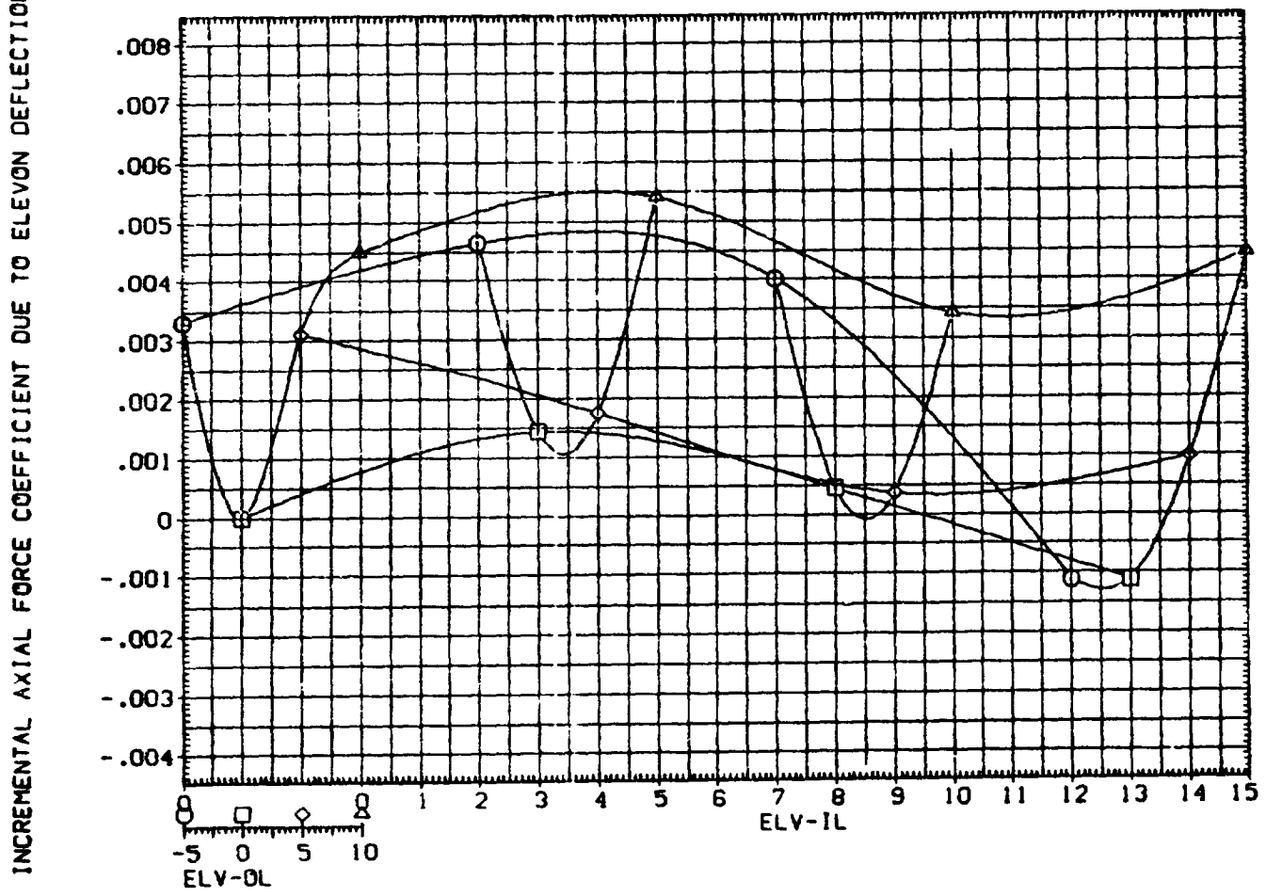
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA=-8.0 (BINCSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

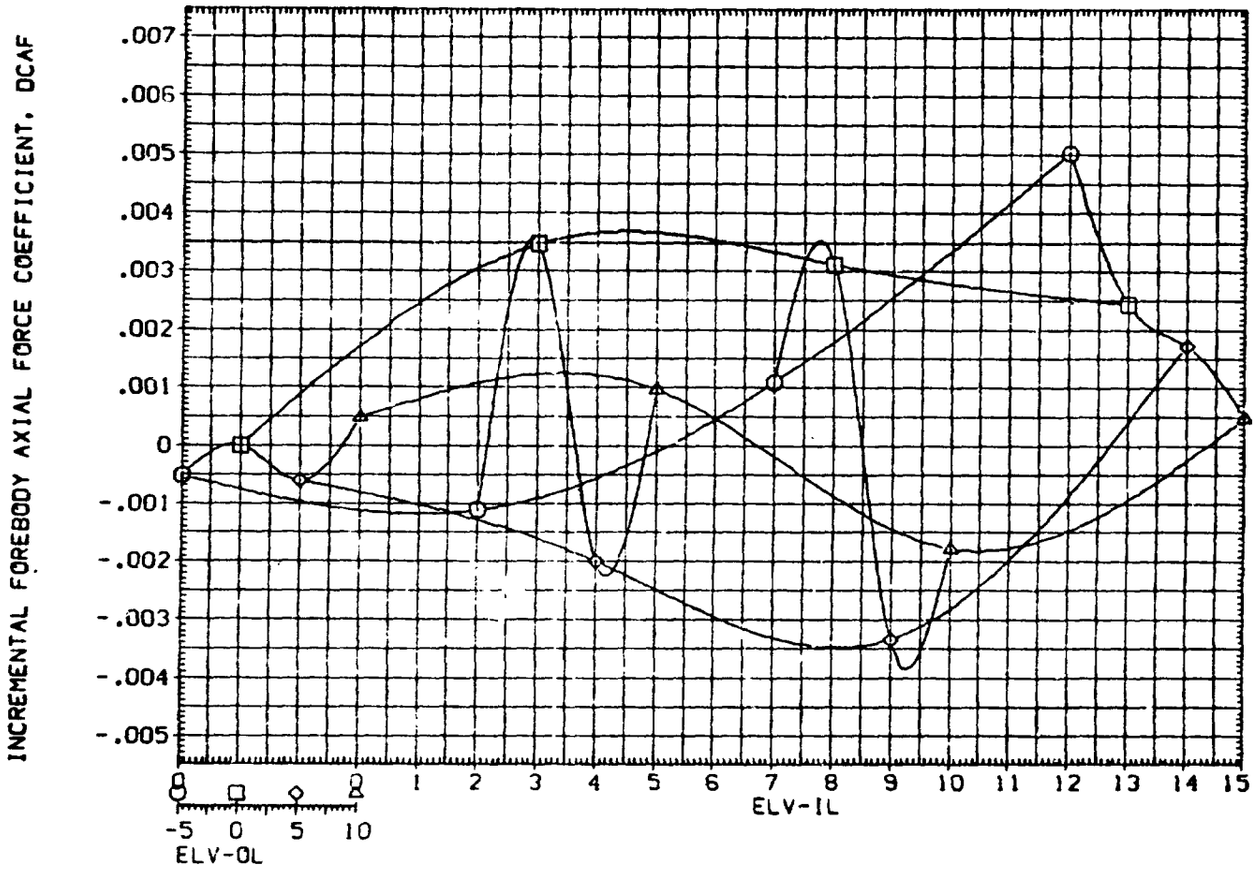
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-8.0 (BINCSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.900	ELV-IR	.000
ELV-OR	000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

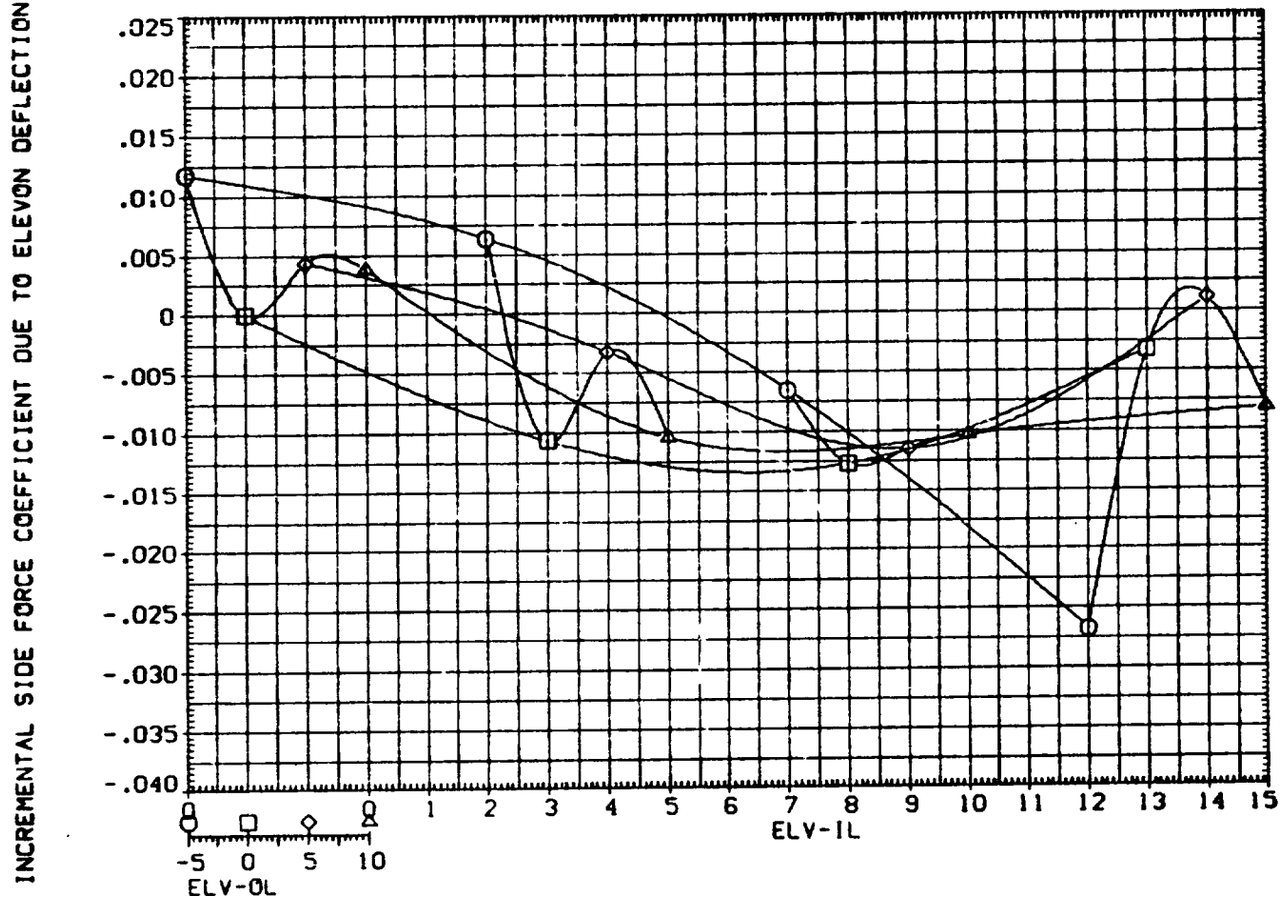
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-8.0 (B1NCSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

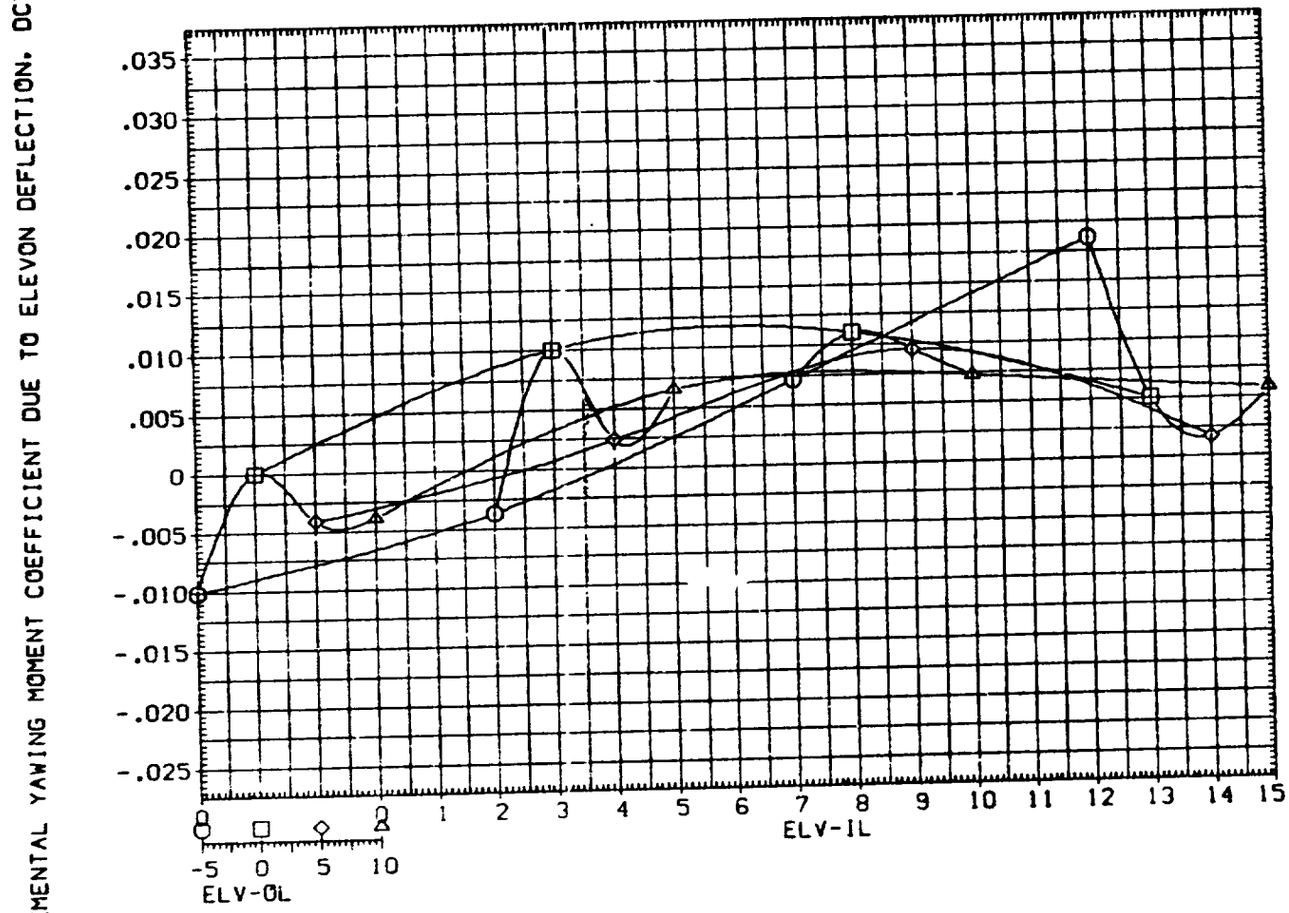
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA=-8.0 (B1NCSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

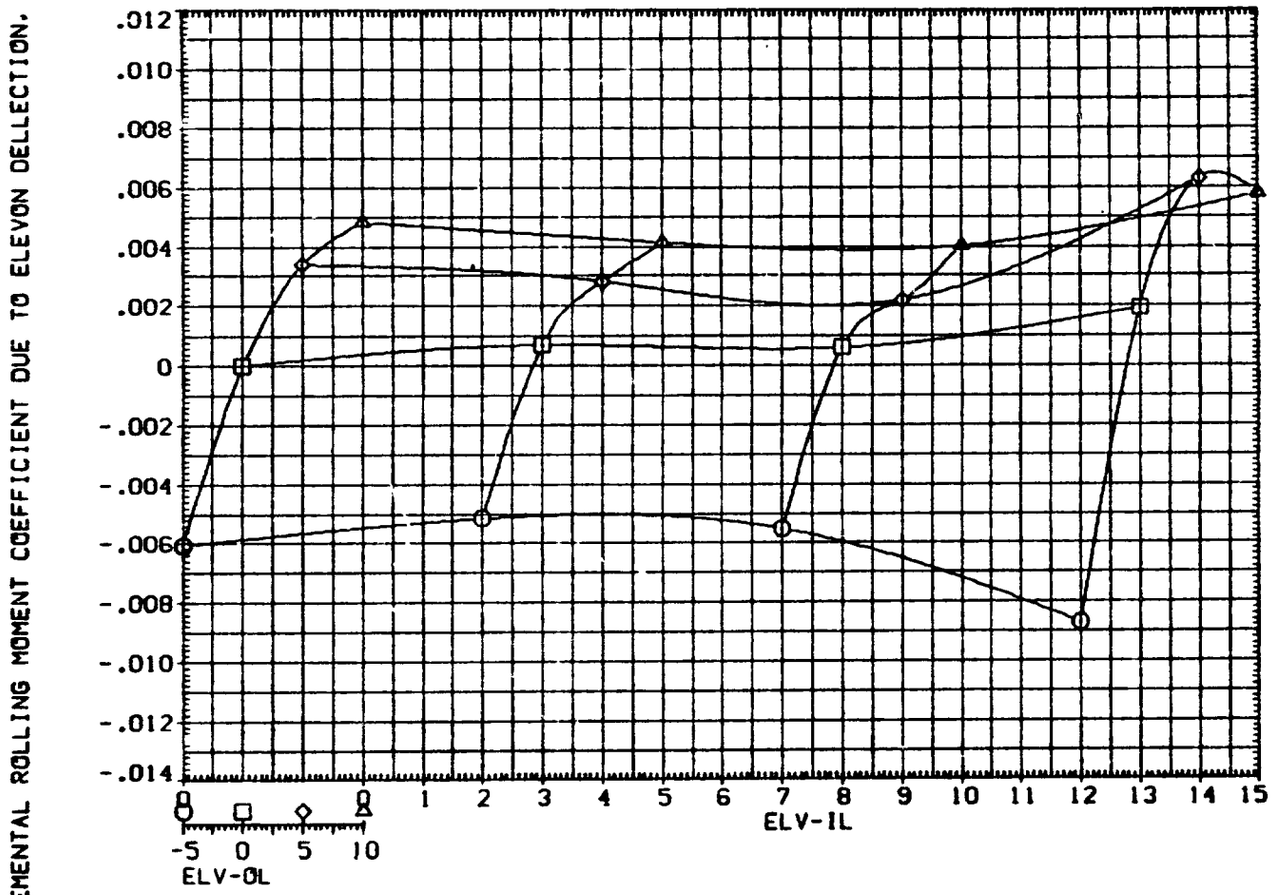
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA=-8.0 (B1NCSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	.900	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

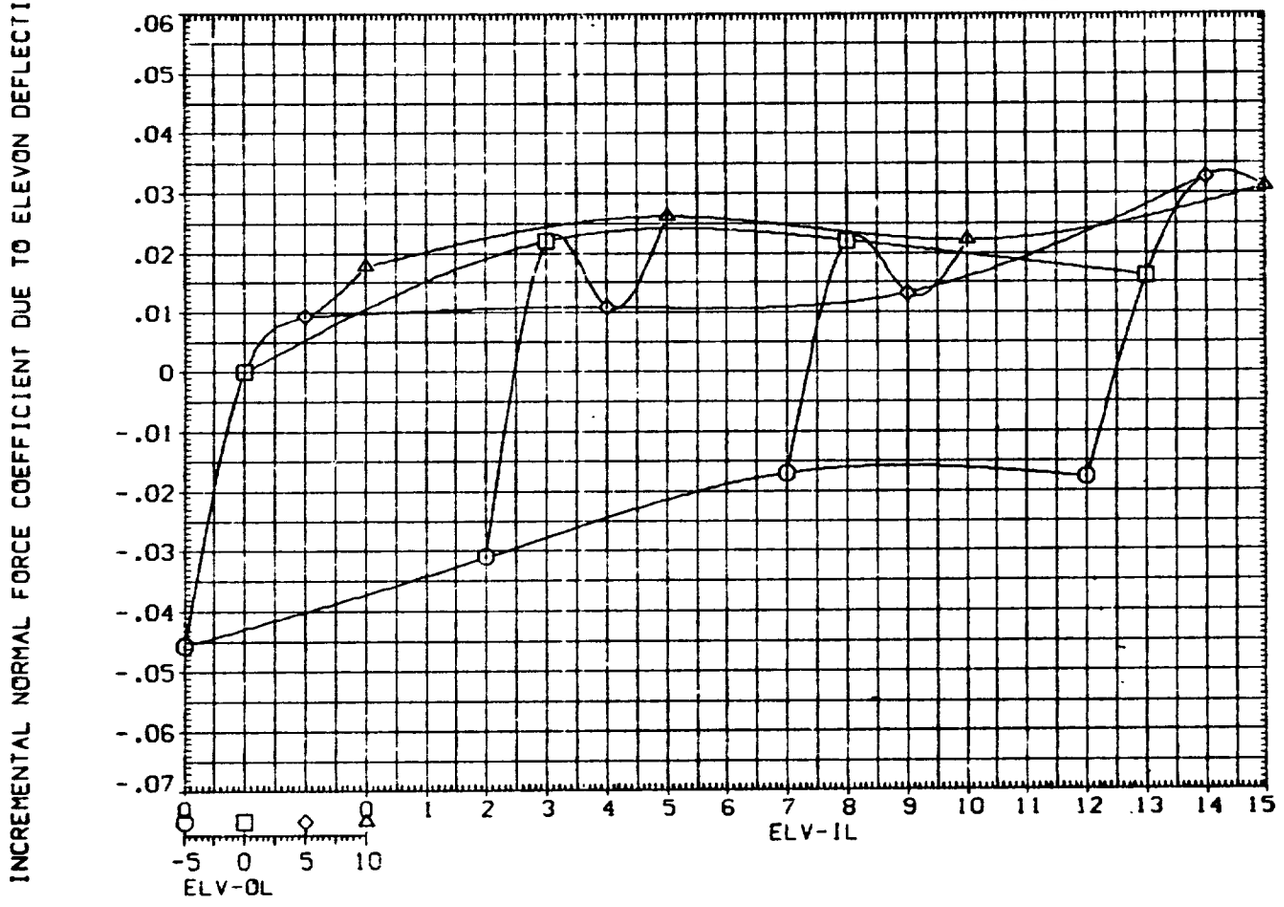
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-6.0 (BINCSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6 000
MACH	.900	ELV-IR	000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

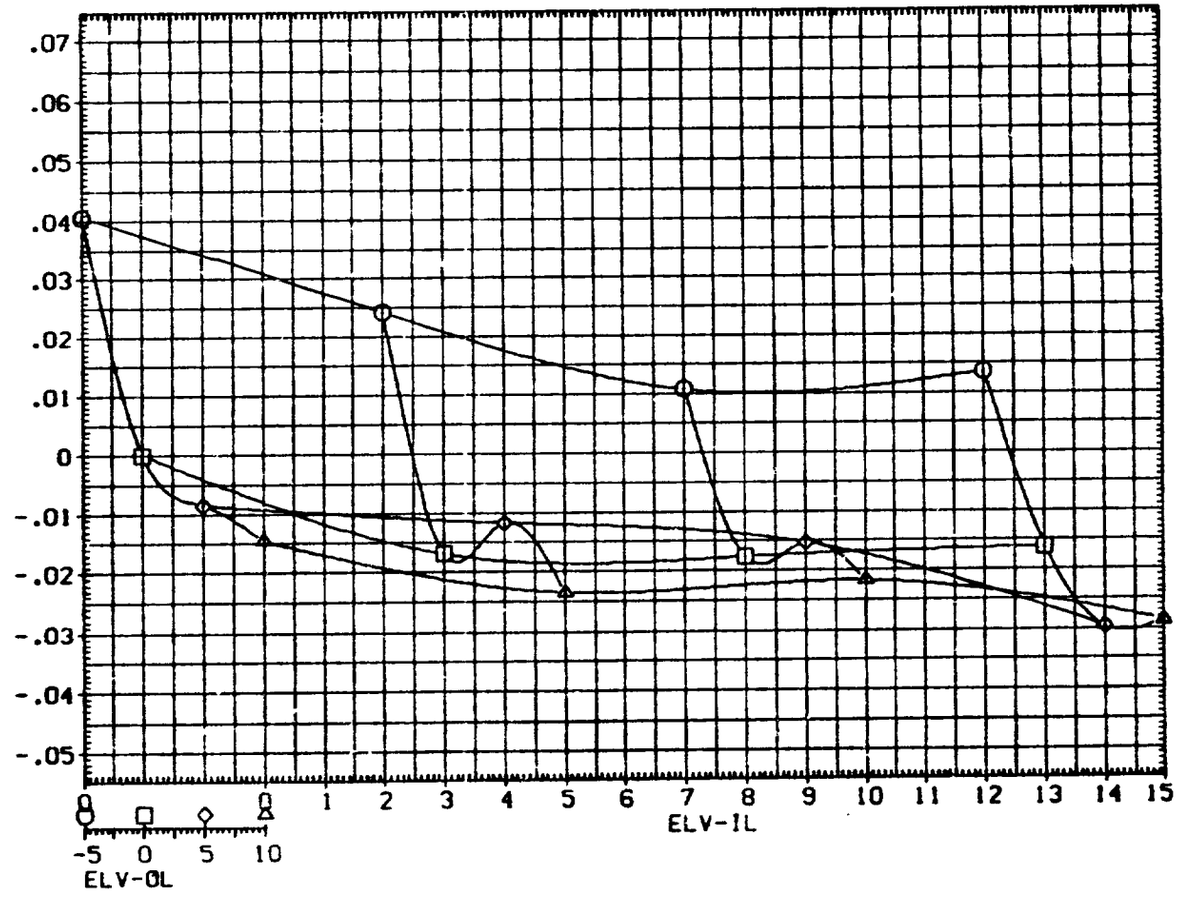
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-6.0 (BINCSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

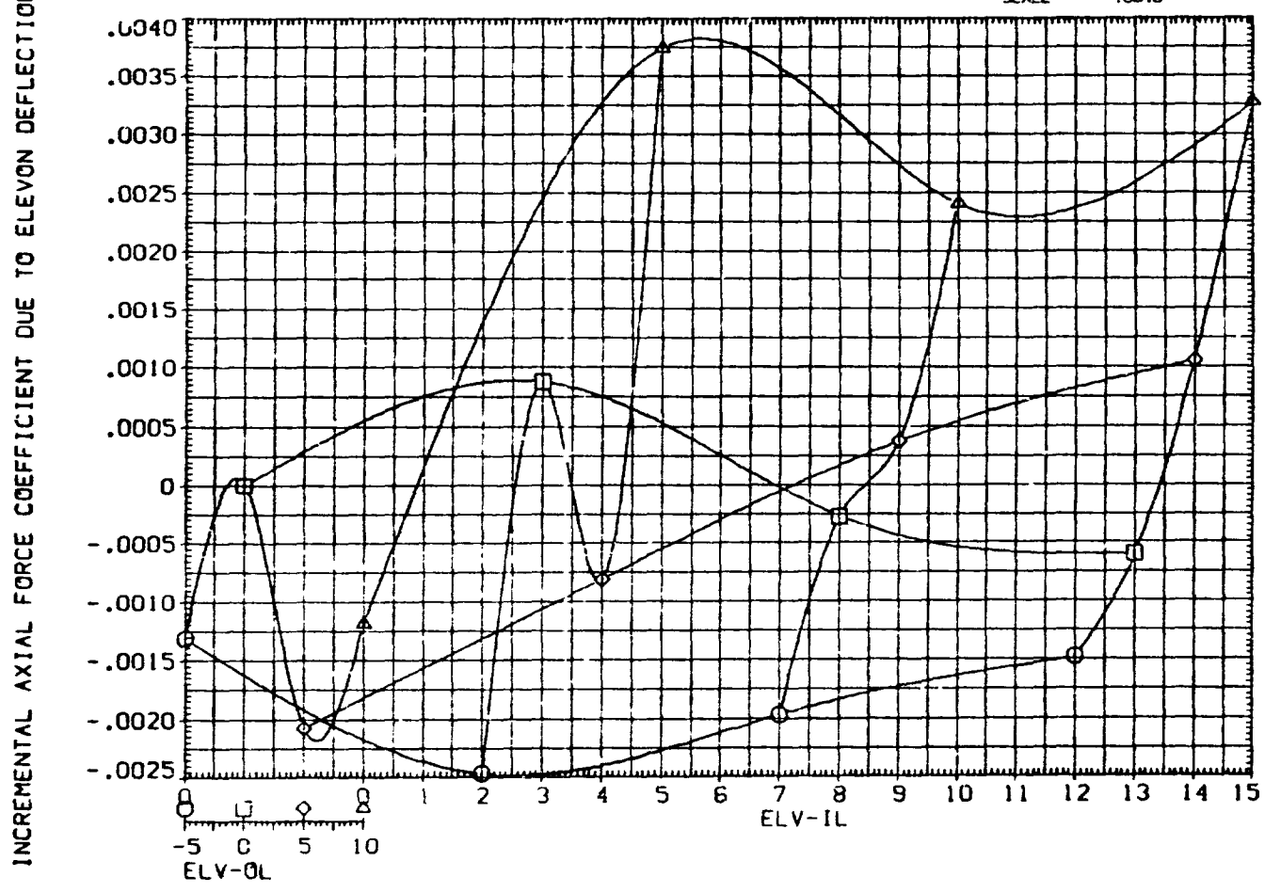
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA=-6.0 (BINCSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

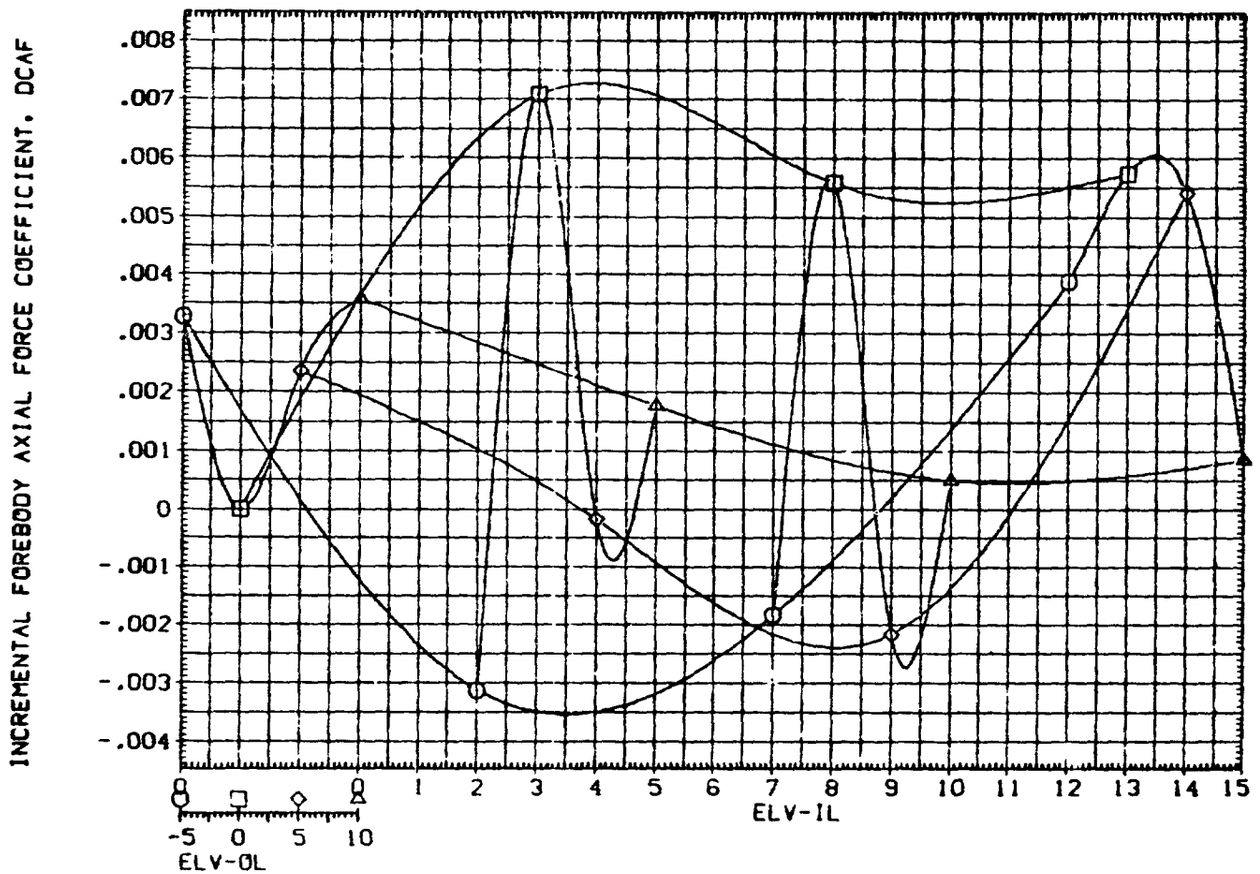
MSFC TWT 622 (IA125) 74 OTS. M= 0.9, ALPHA=-6.0 (BINCSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

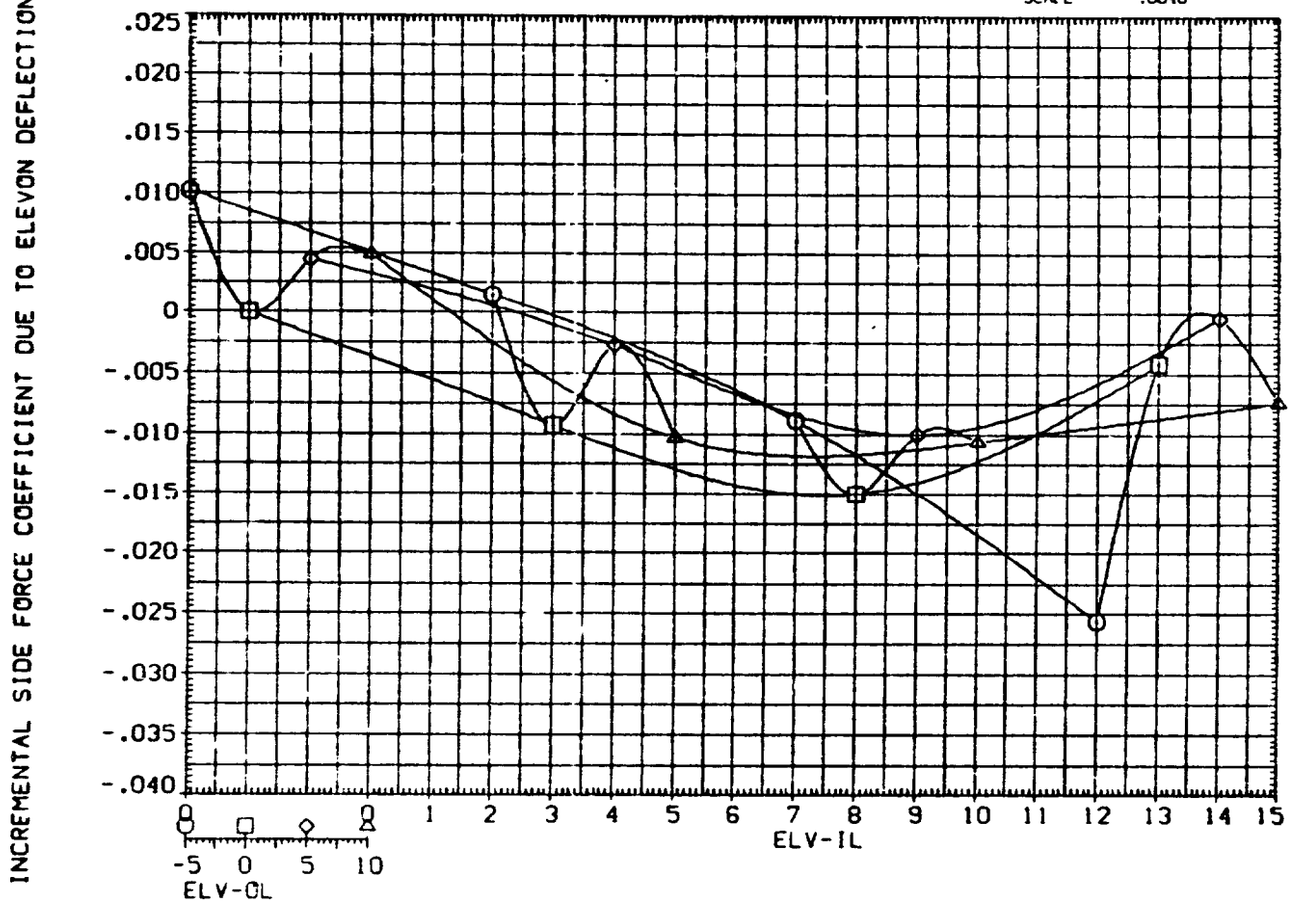
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-6.0 (BINCSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0300	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

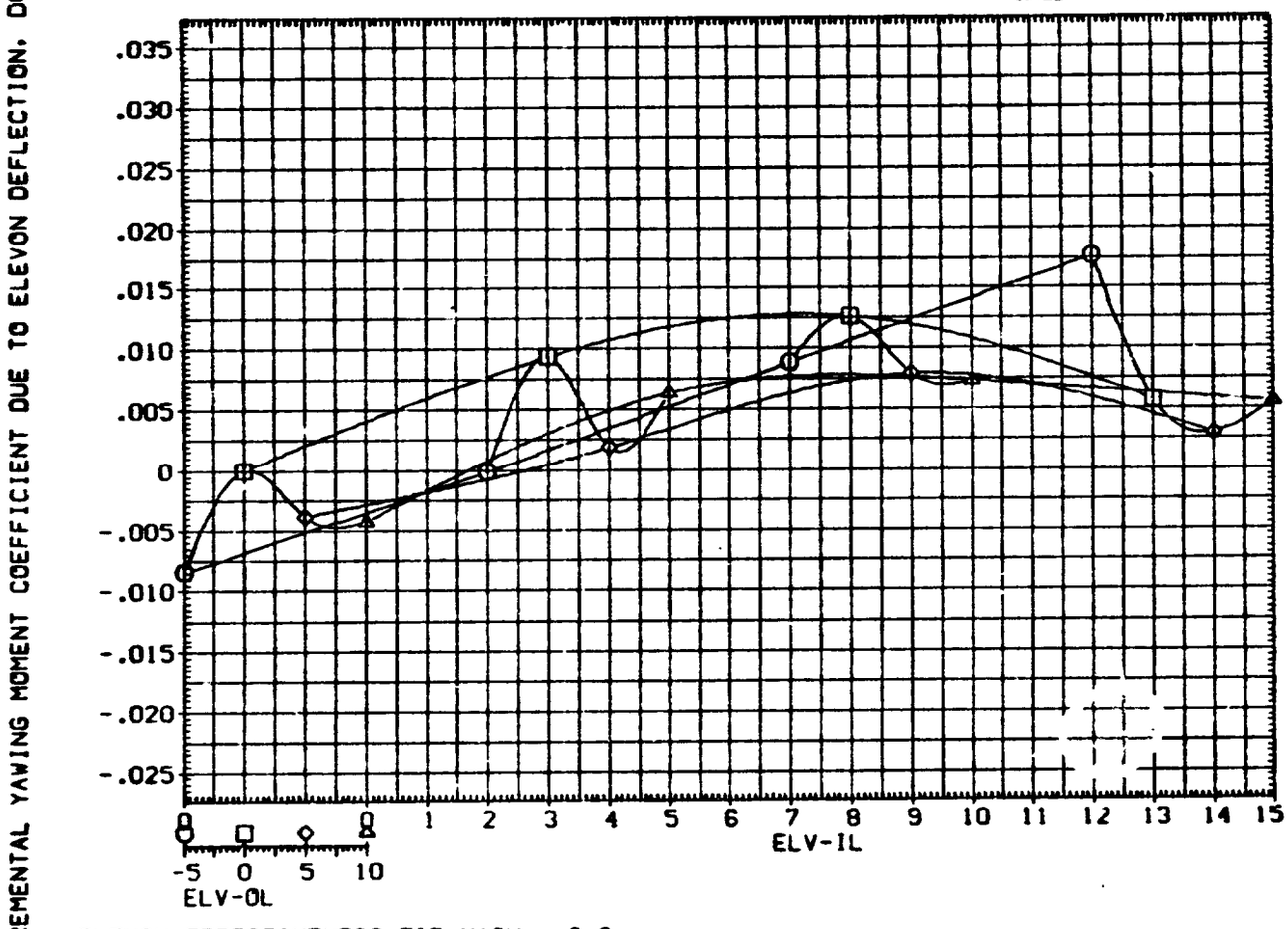
MSFC TWT 622 (IA125) 74 OTS. M= 0.9, ALPHA=-6.0 (B1NCSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.900	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

P

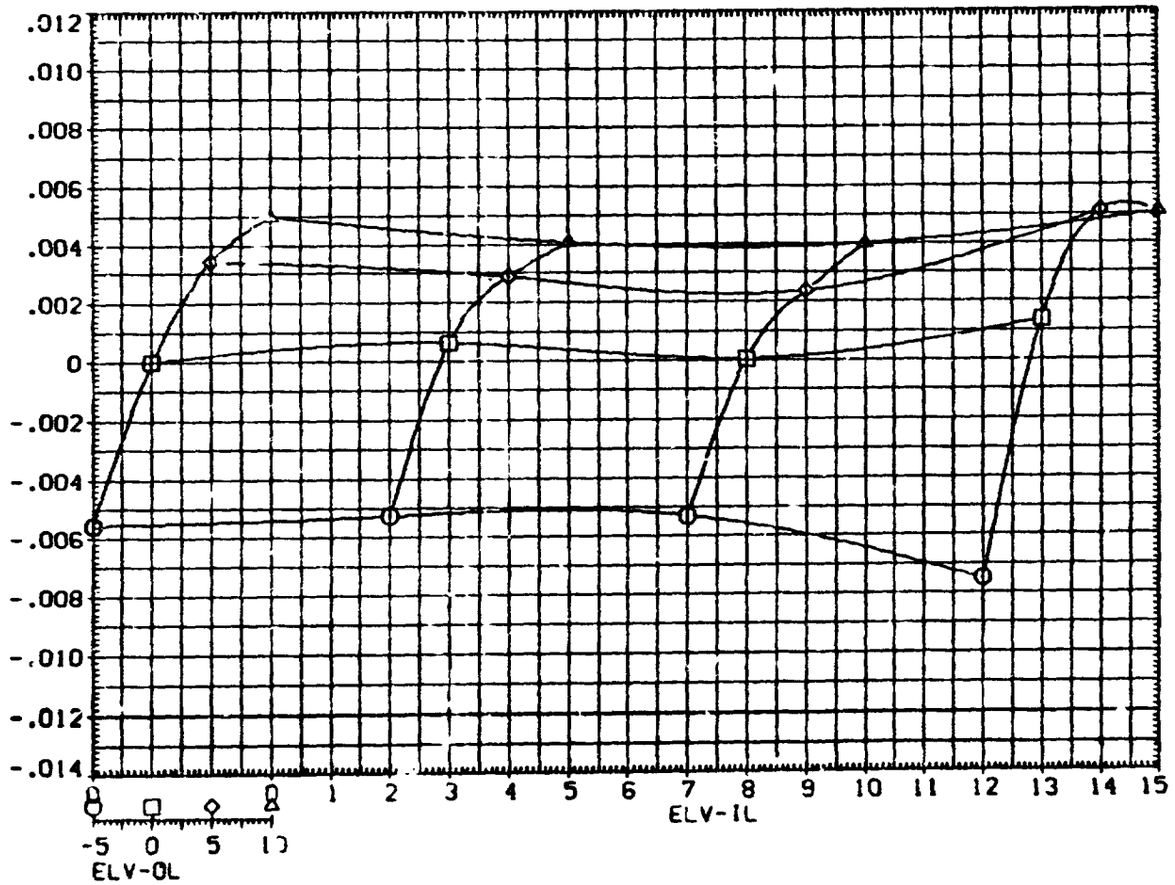
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-6.0 (B1NCSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	.900	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

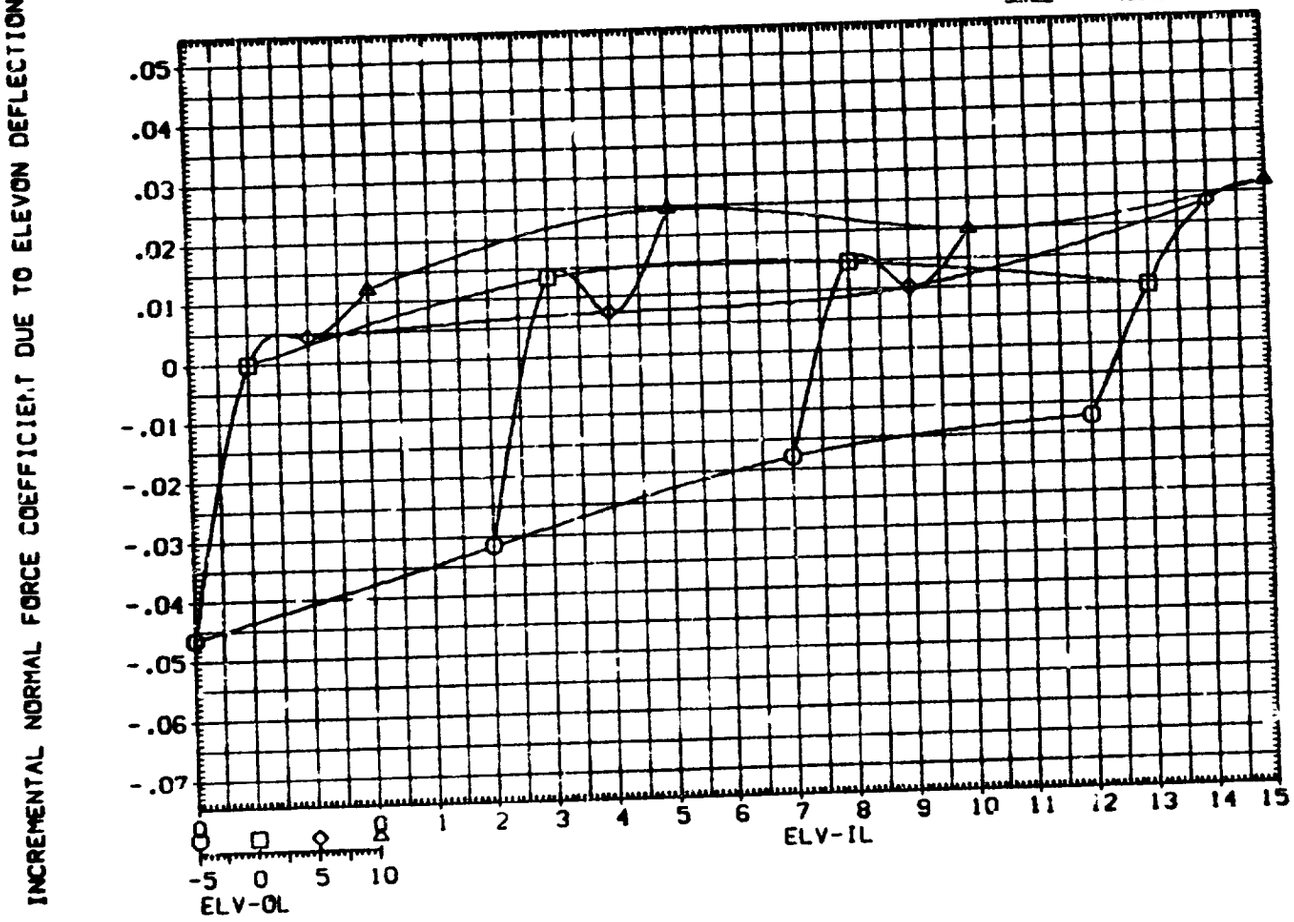
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA=-4.0 (BINCSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

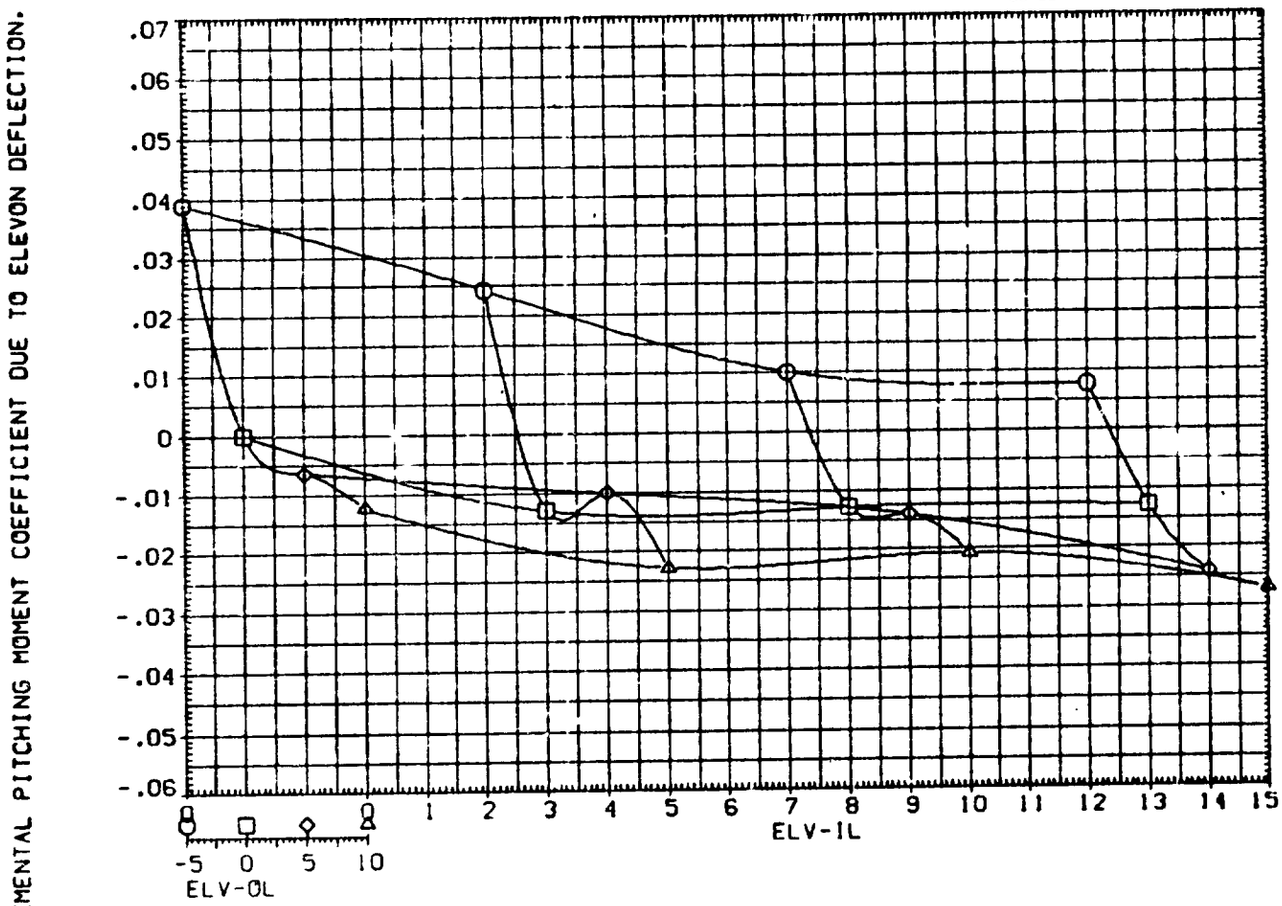
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-4.0 (BINCSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

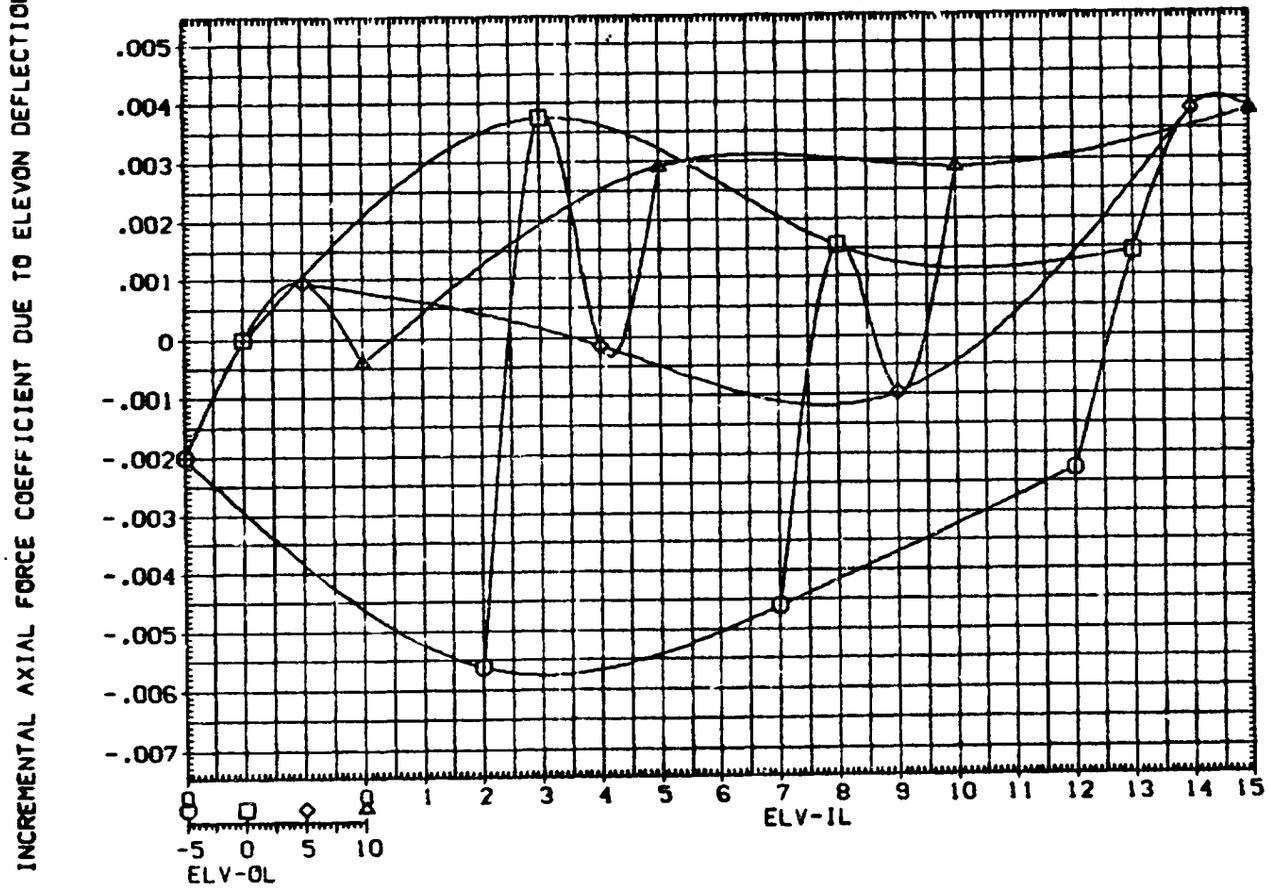
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-4.0 (BINCSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2890.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

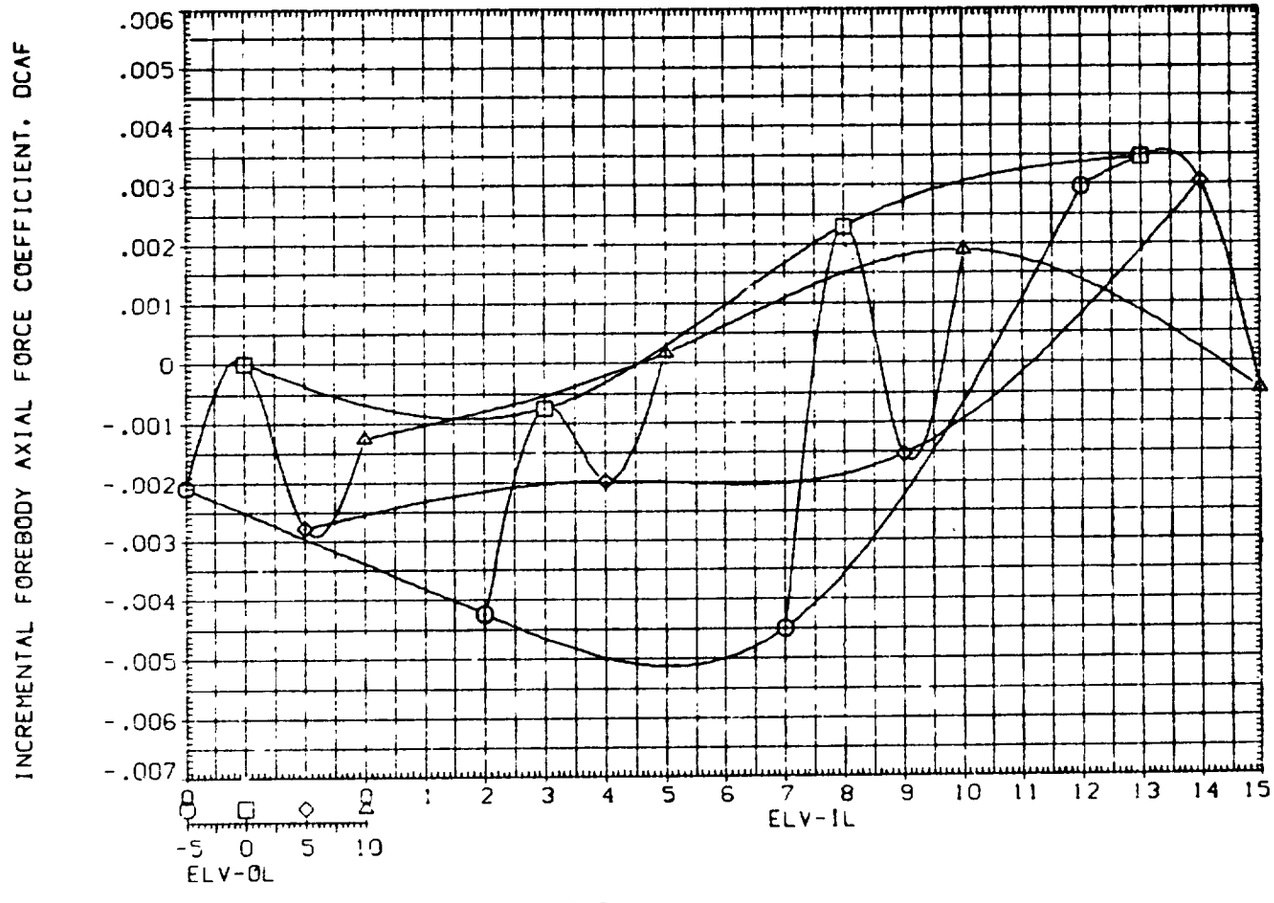
MSFC TWT 622 (!A125) 74 OTS, M= 0.9, ALPHA=-4.0 (BINCSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

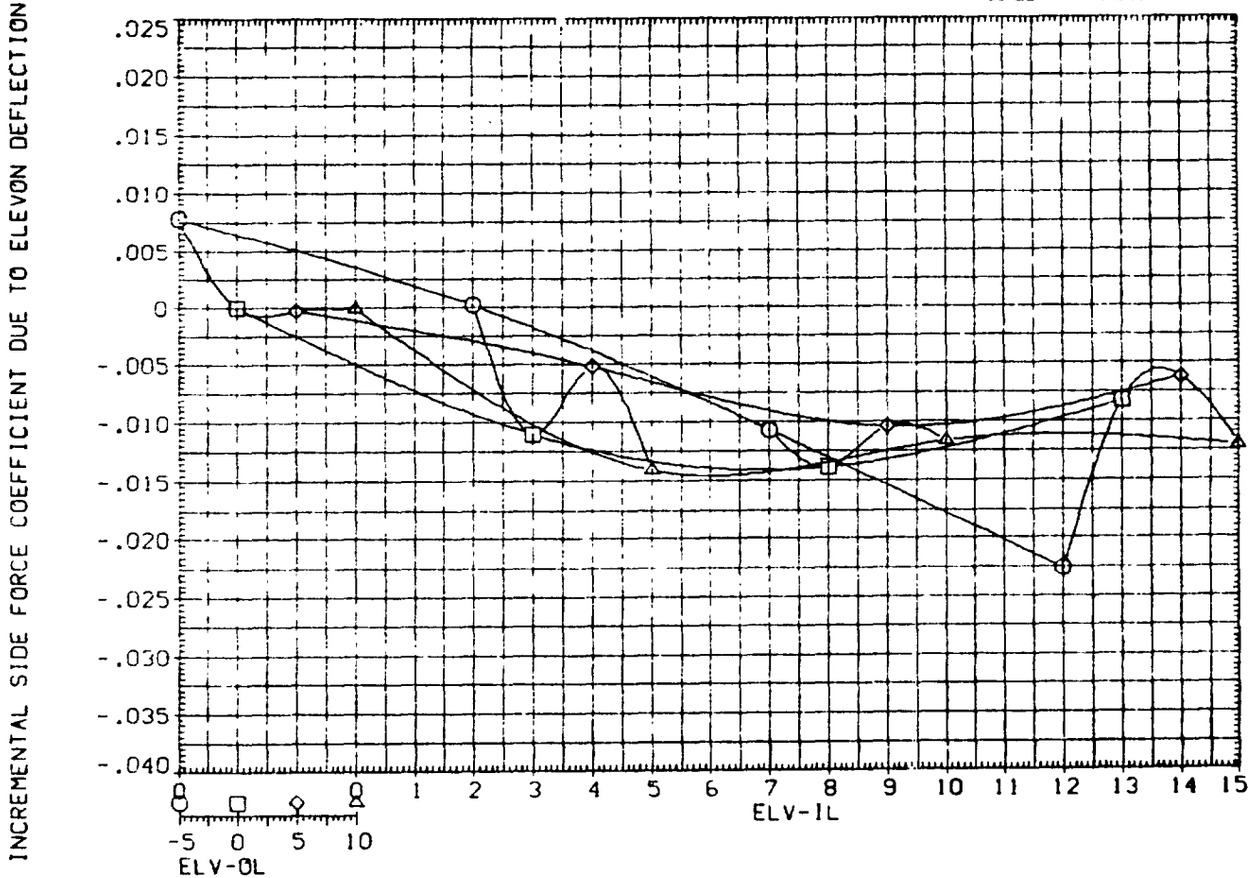
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA=-4.0 (BINCSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

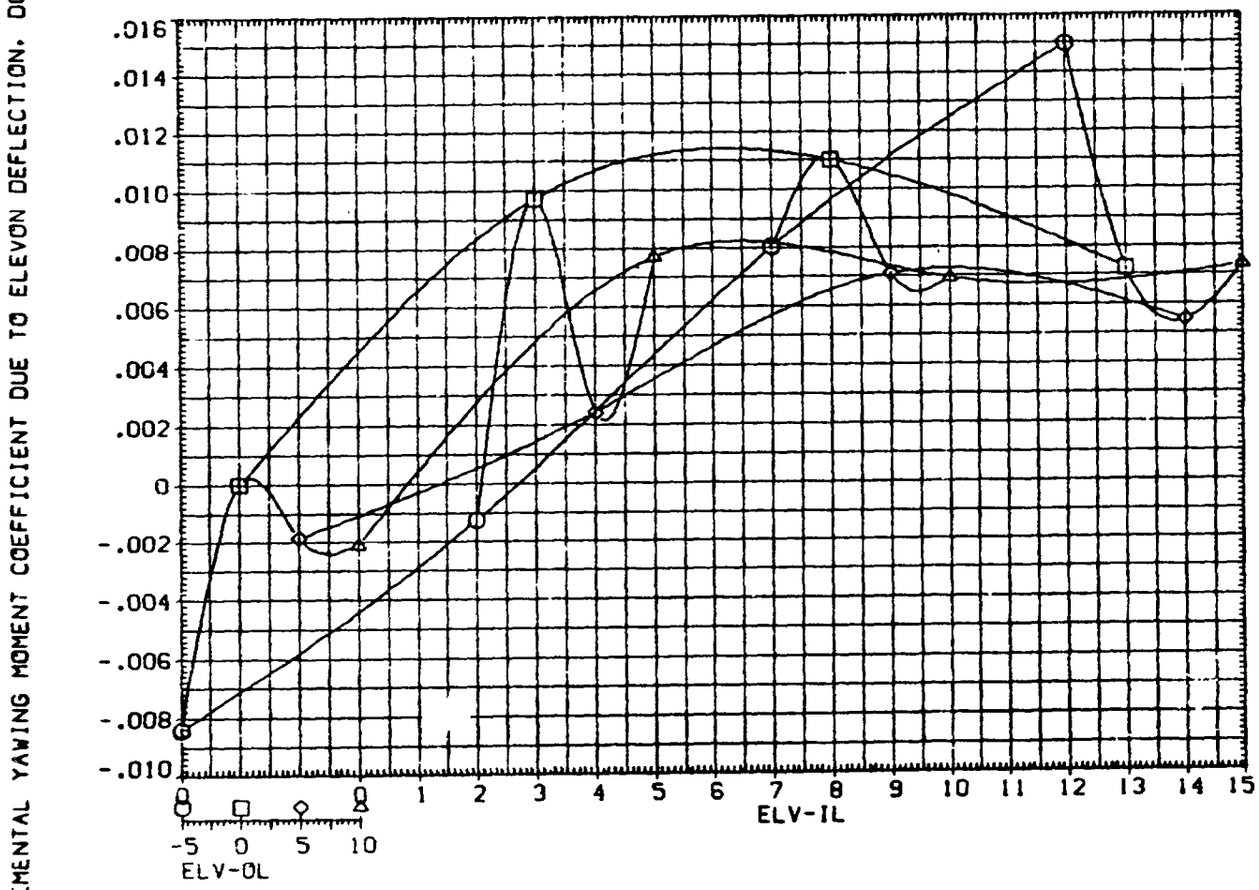
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-4.0 (BINCSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

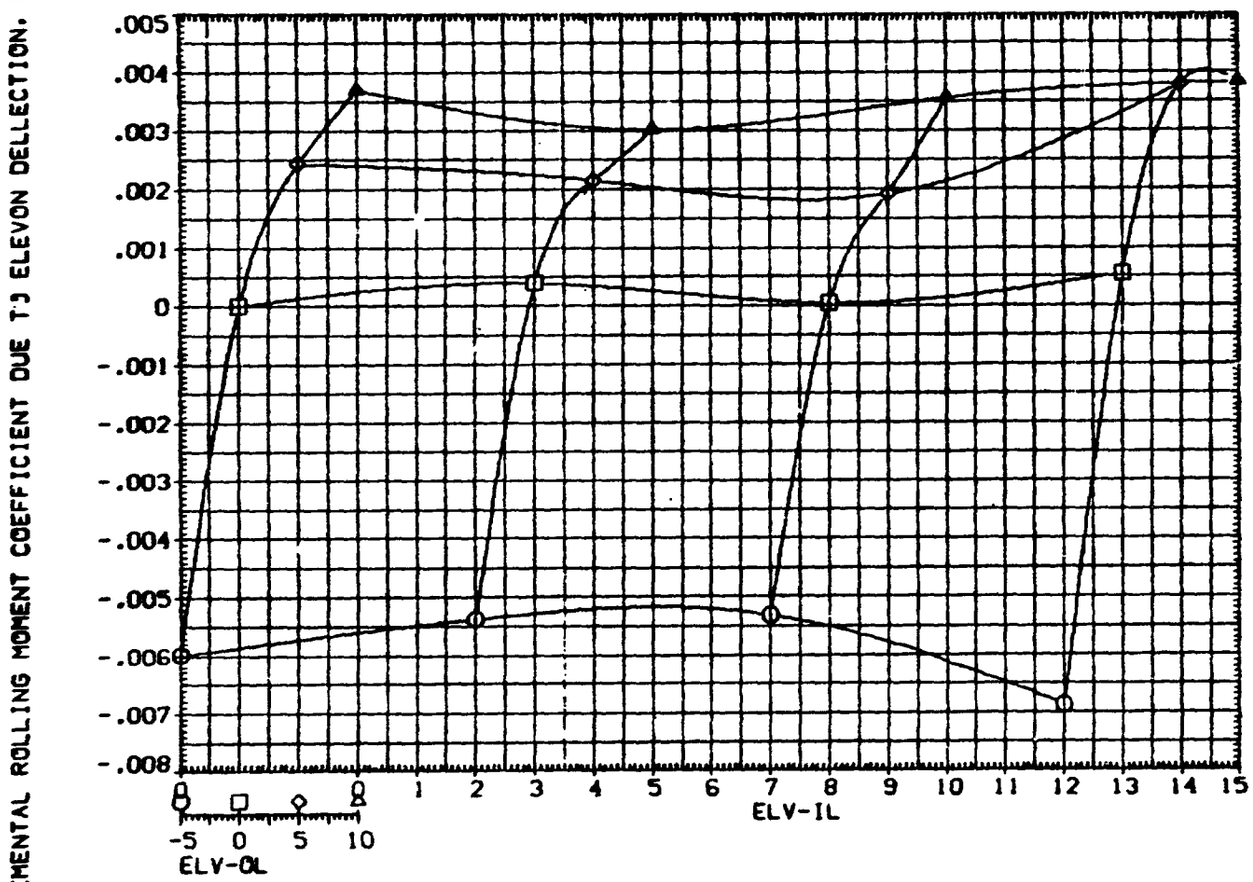
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA=-4.0 (BINCSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

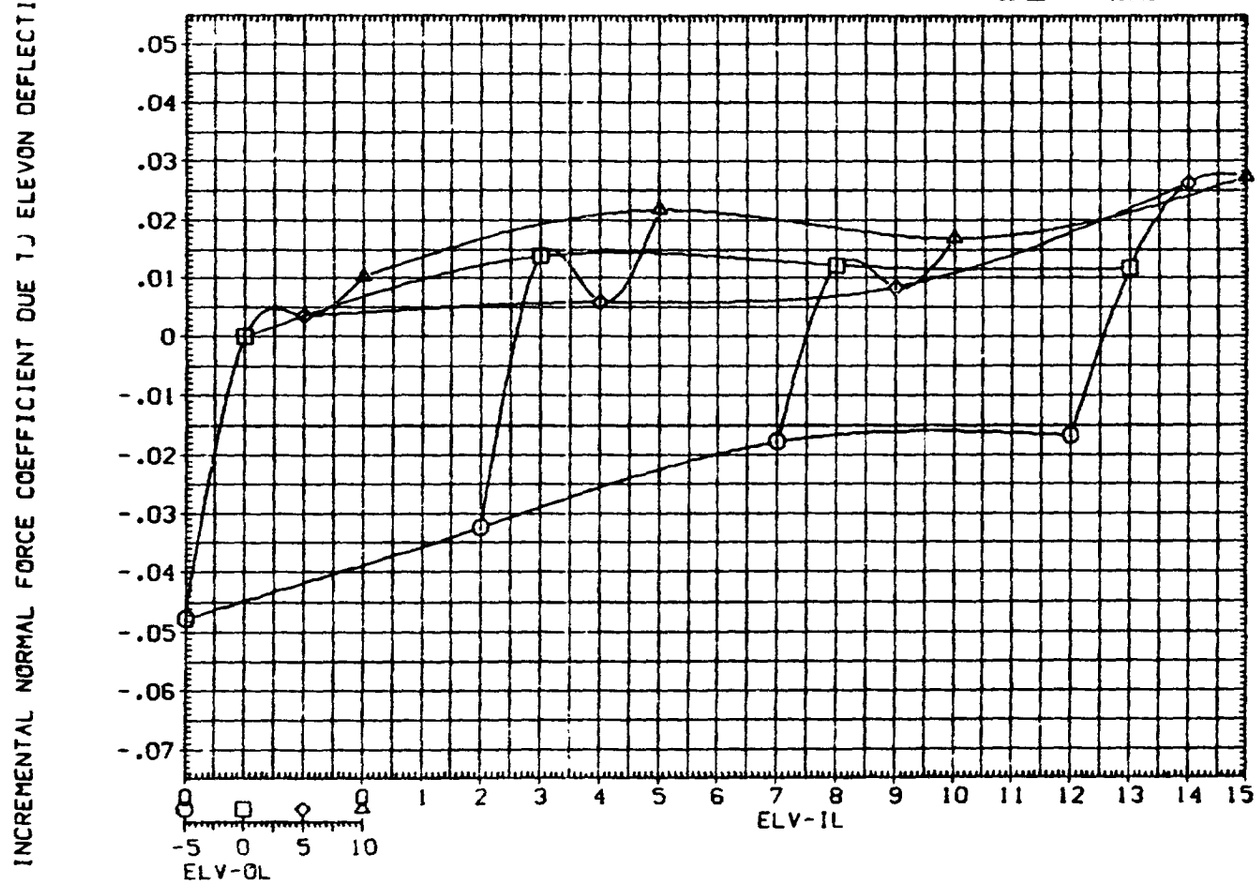
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-2.0 (BINCSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.900	ELV-IR	.100
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

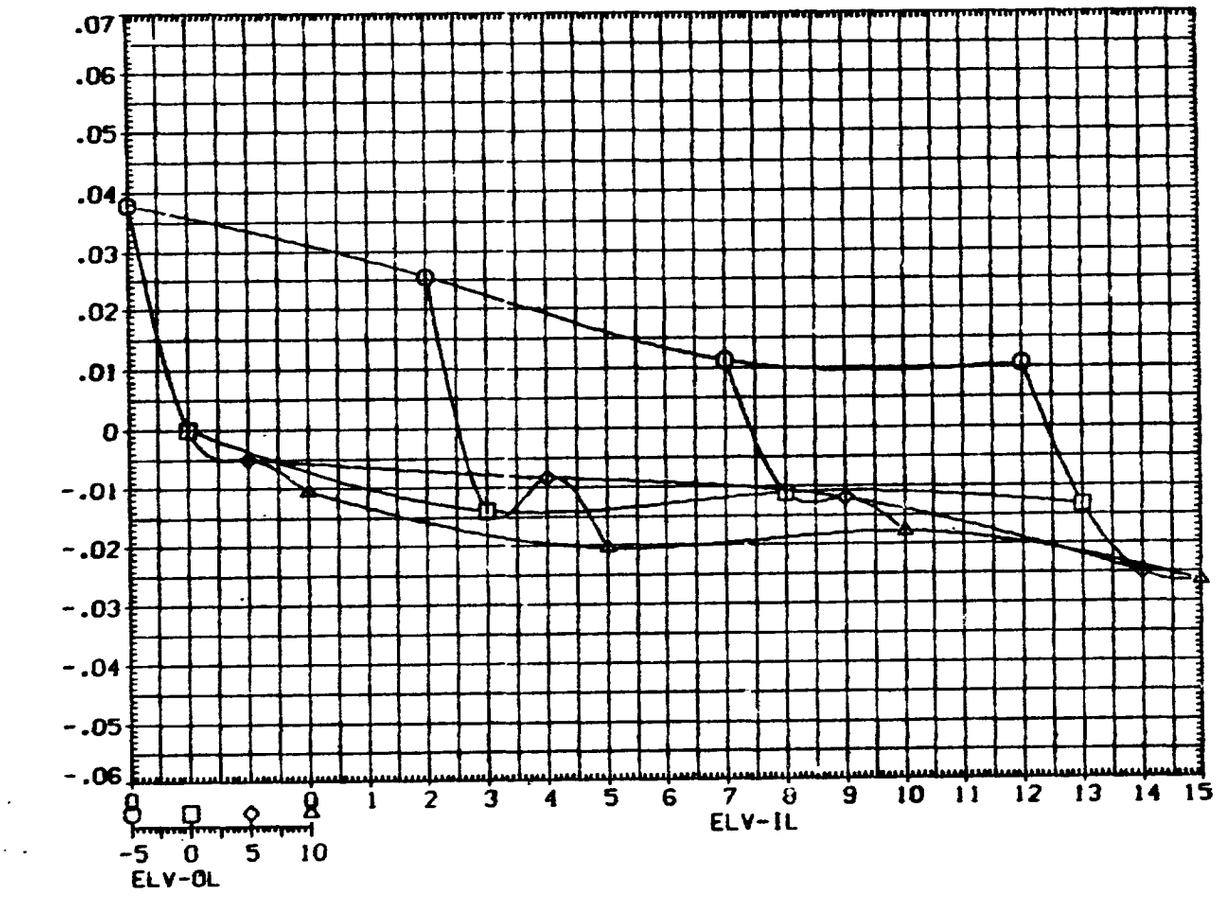
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA=-2.0 (BINCSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

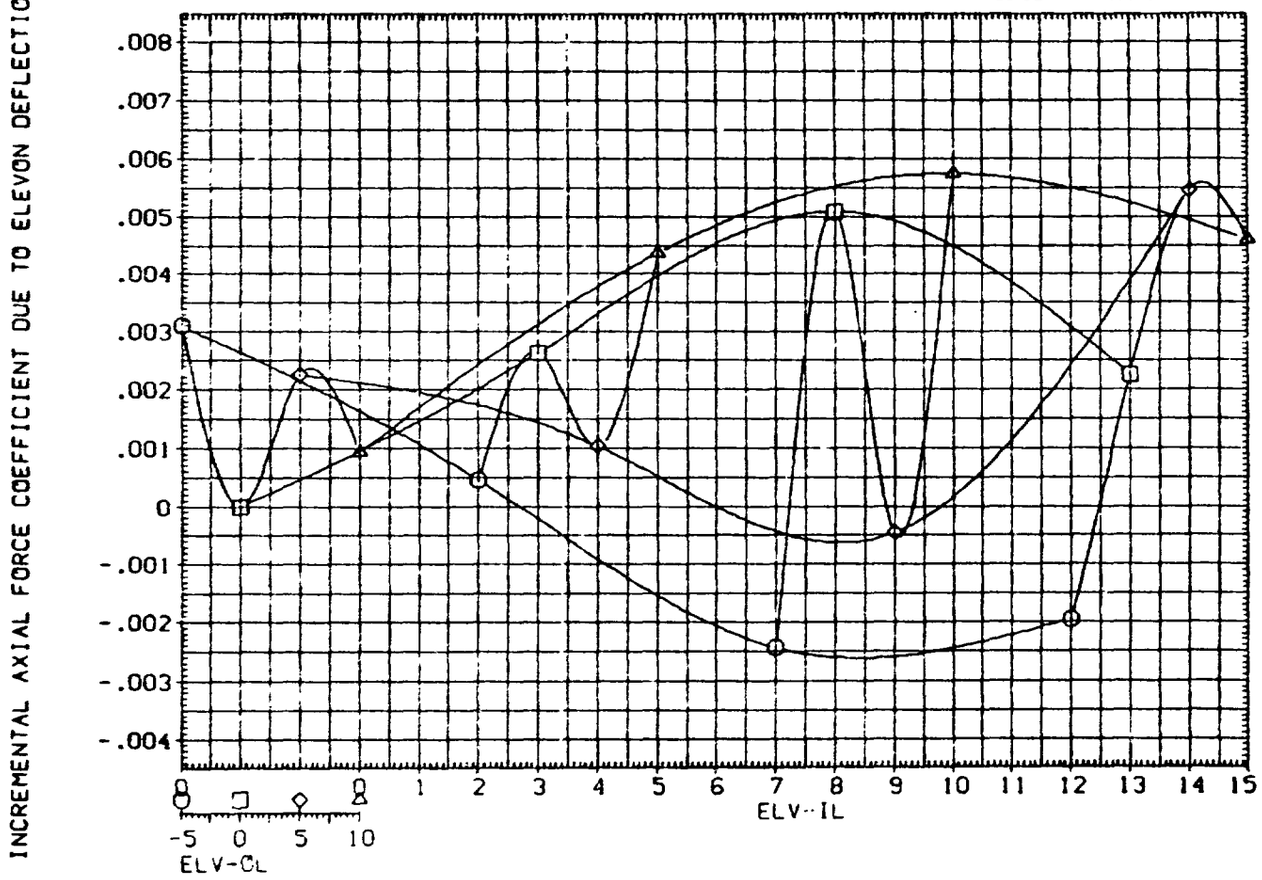
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-2.0 (BINCSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

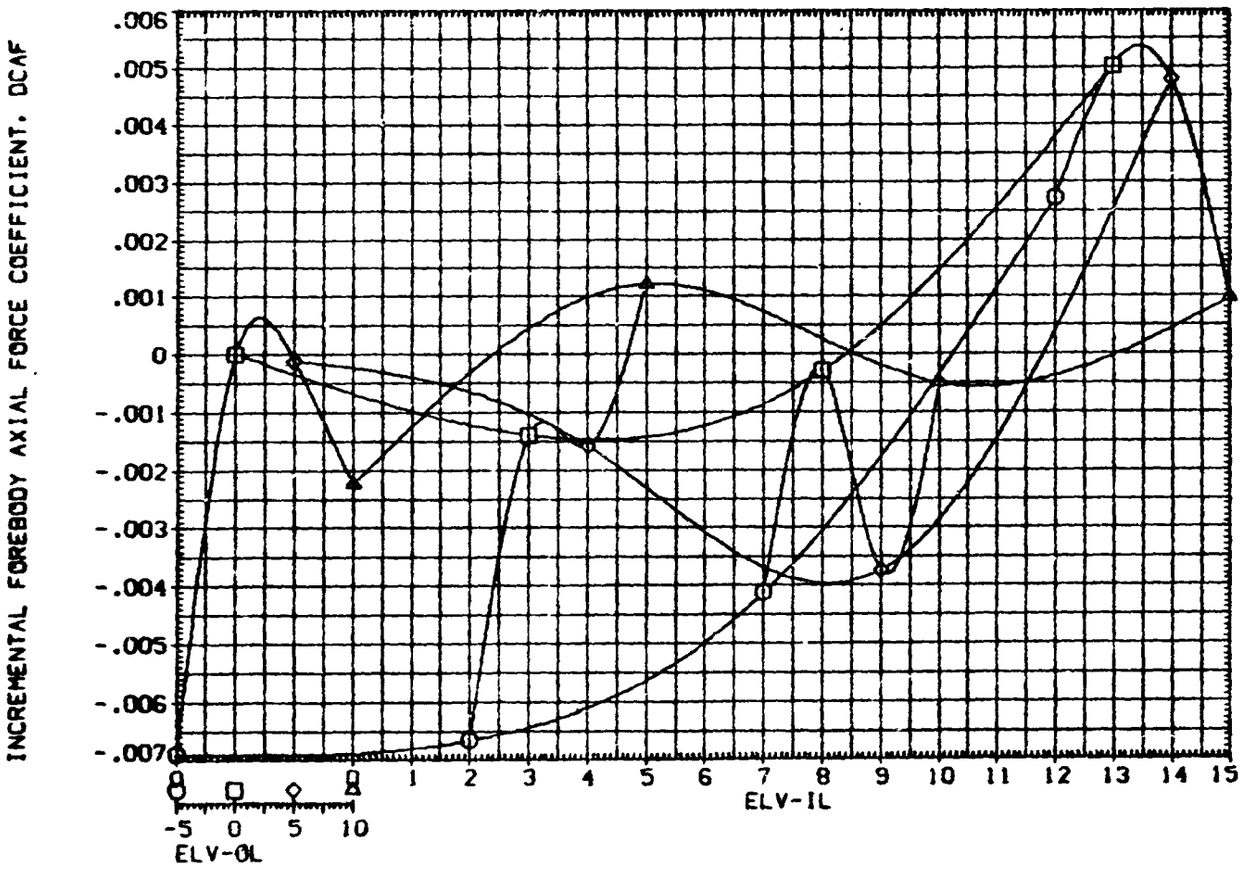
MSFC TWT 622 (IA125) 74 OTS. M= 0.9, ALPHA=-2.0 (BINCSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

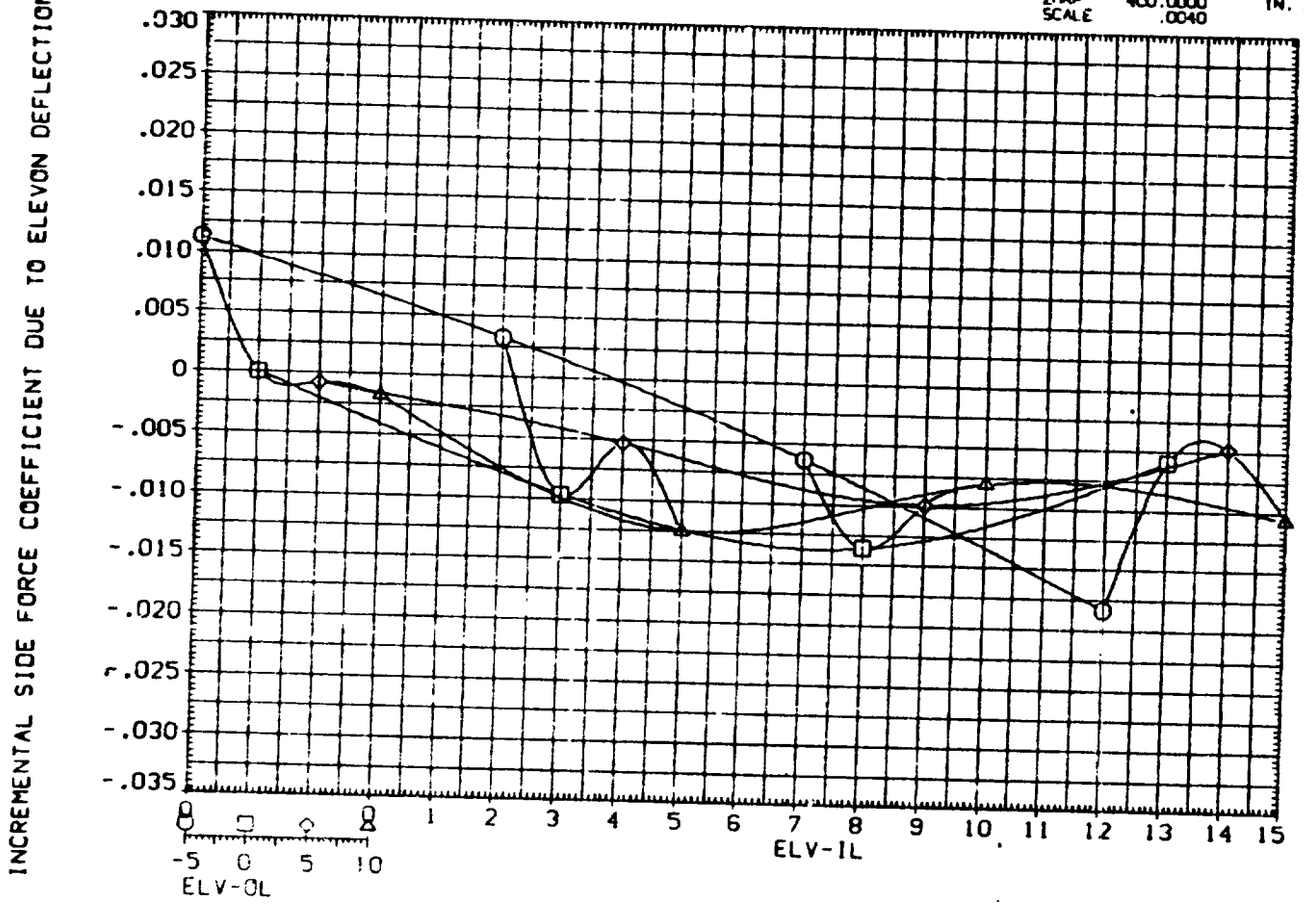
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA=-2.0 (BINCSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

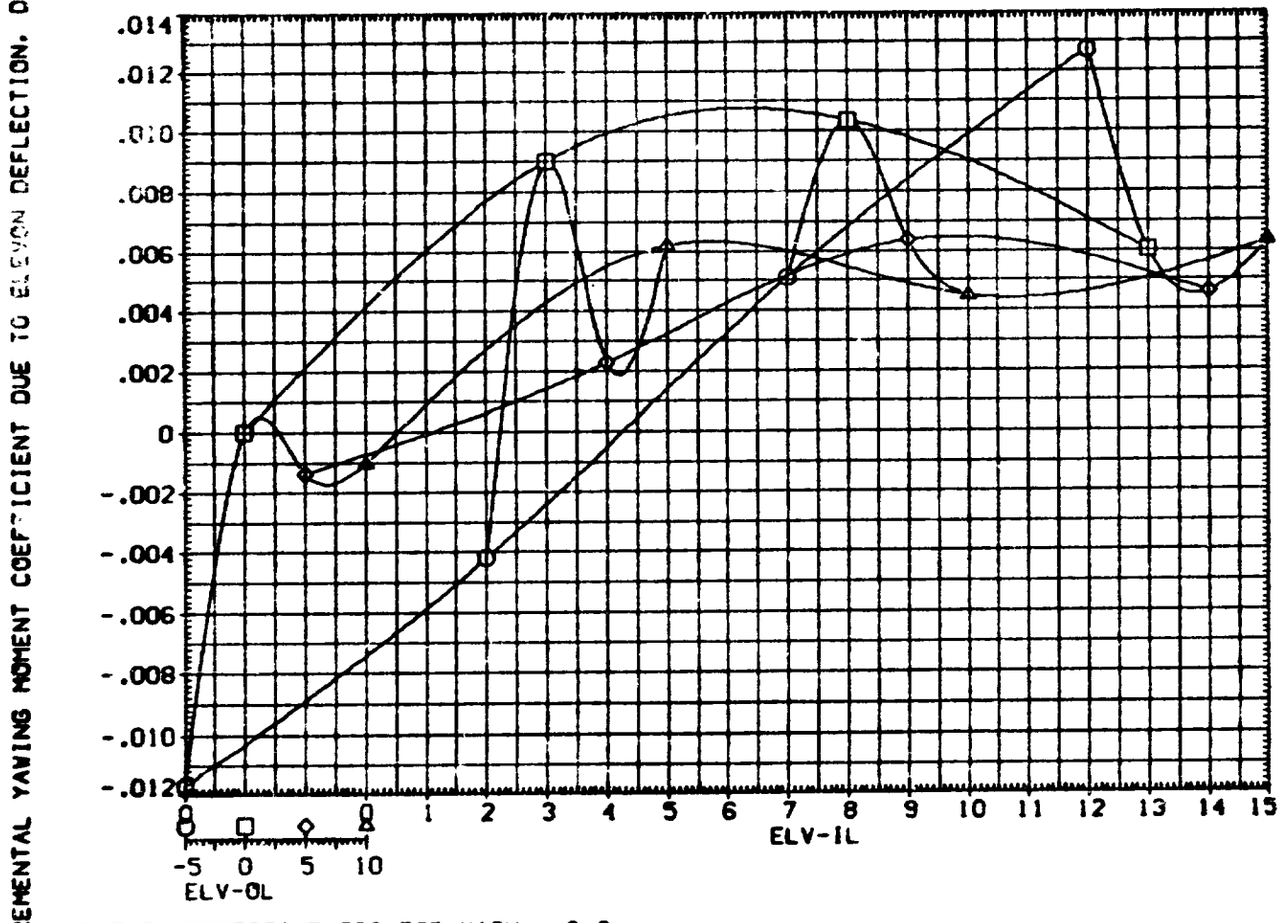
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA=-2.0 (BINCSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

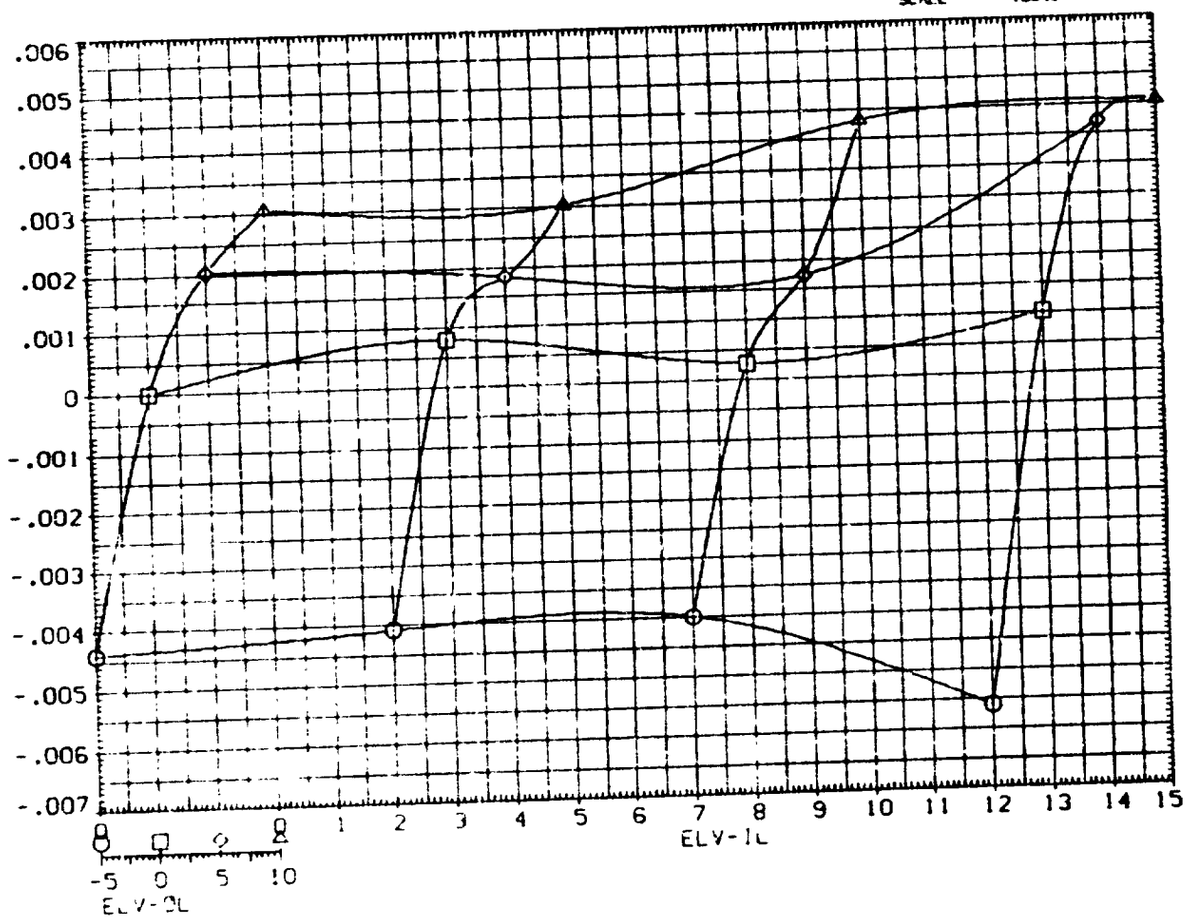
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA=-2.0 (BINCSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

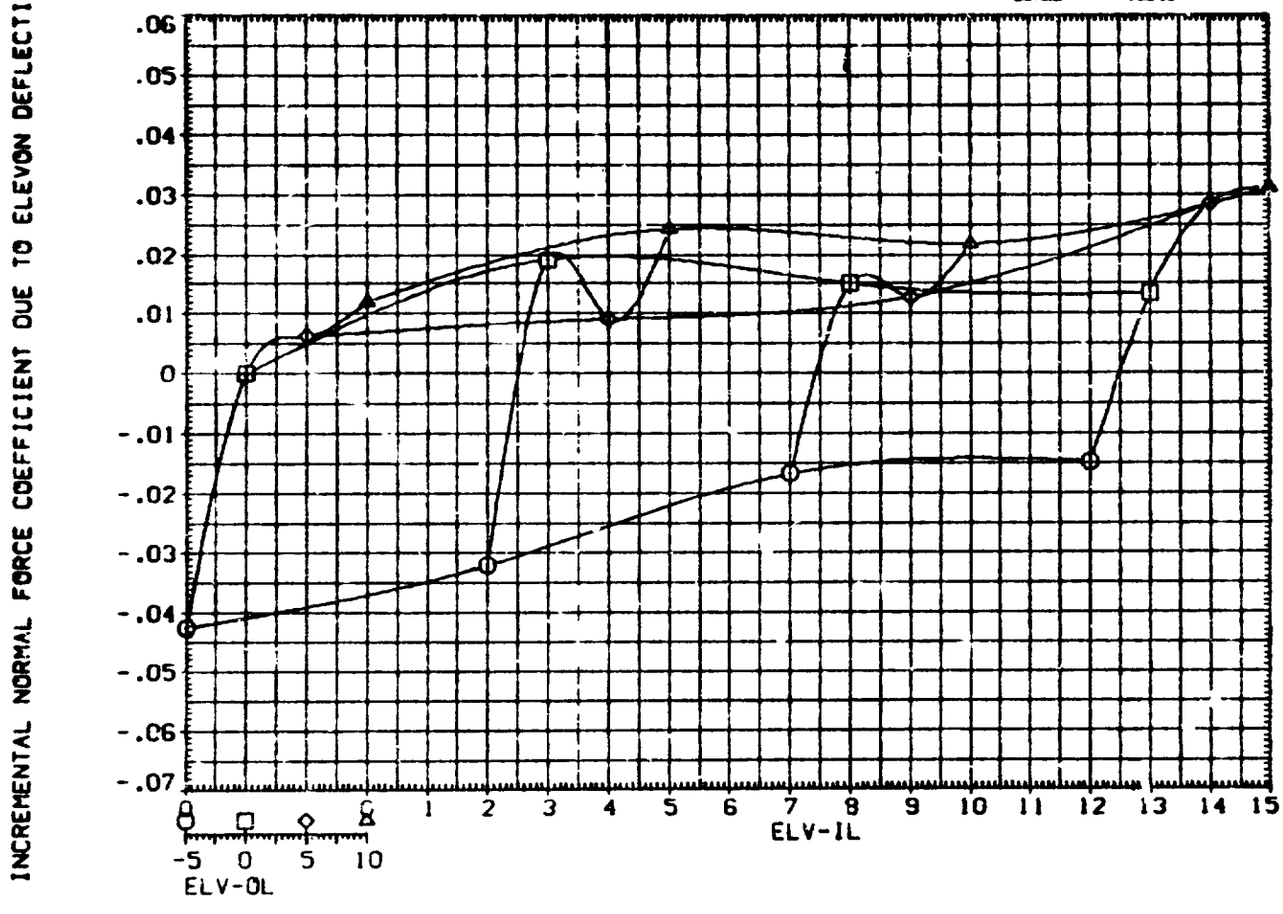
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA= 0.0 (BINCSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

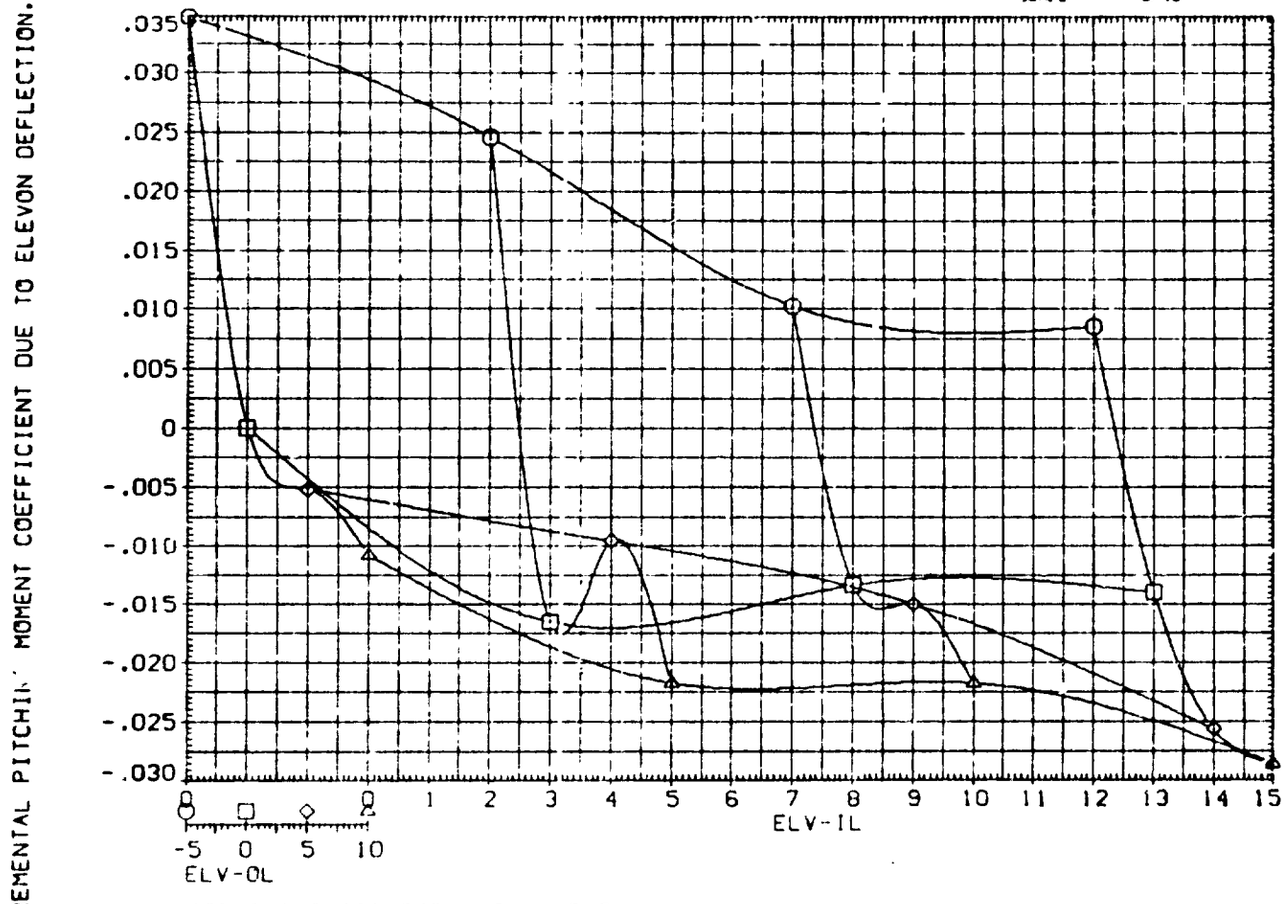
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 0.0 (BINCSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	000
MACH	900	ELV-IR	000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	.90 0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976 0000	IN. XT
YMRP	0000	IN YT
ZMRP	400.0000	IN. ZT
SCALE	0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

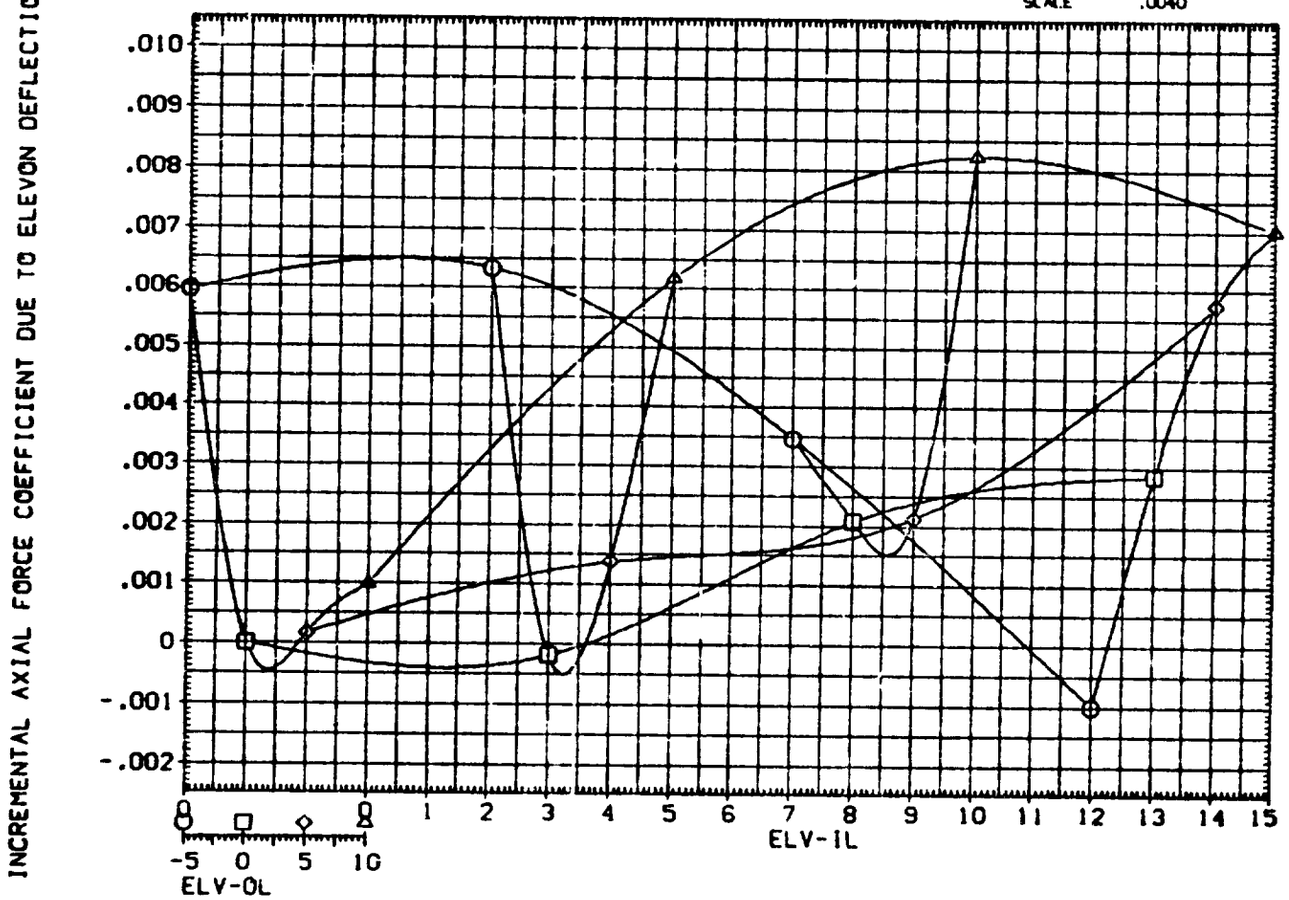
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA= 0.0 (BINCSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

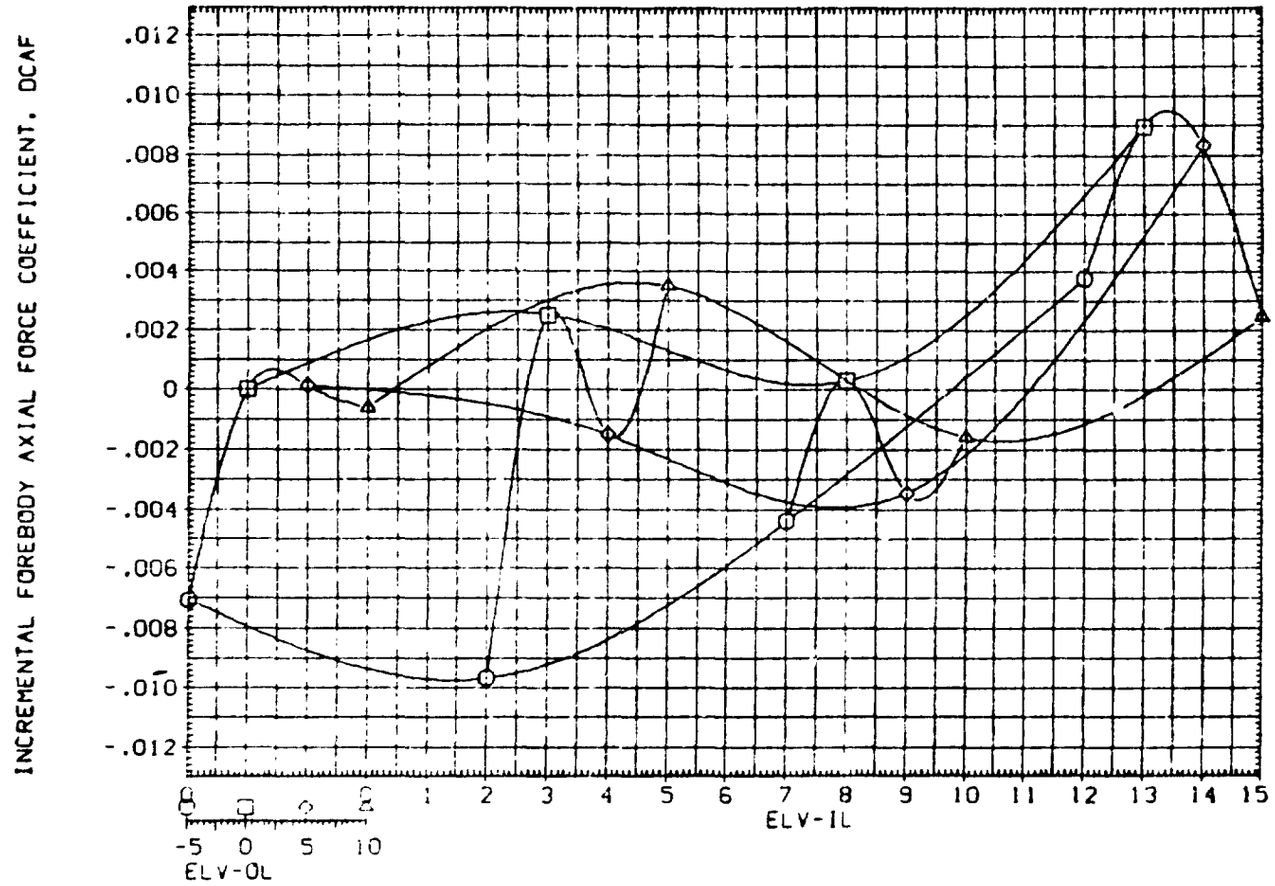
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 0.0 (BINCSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

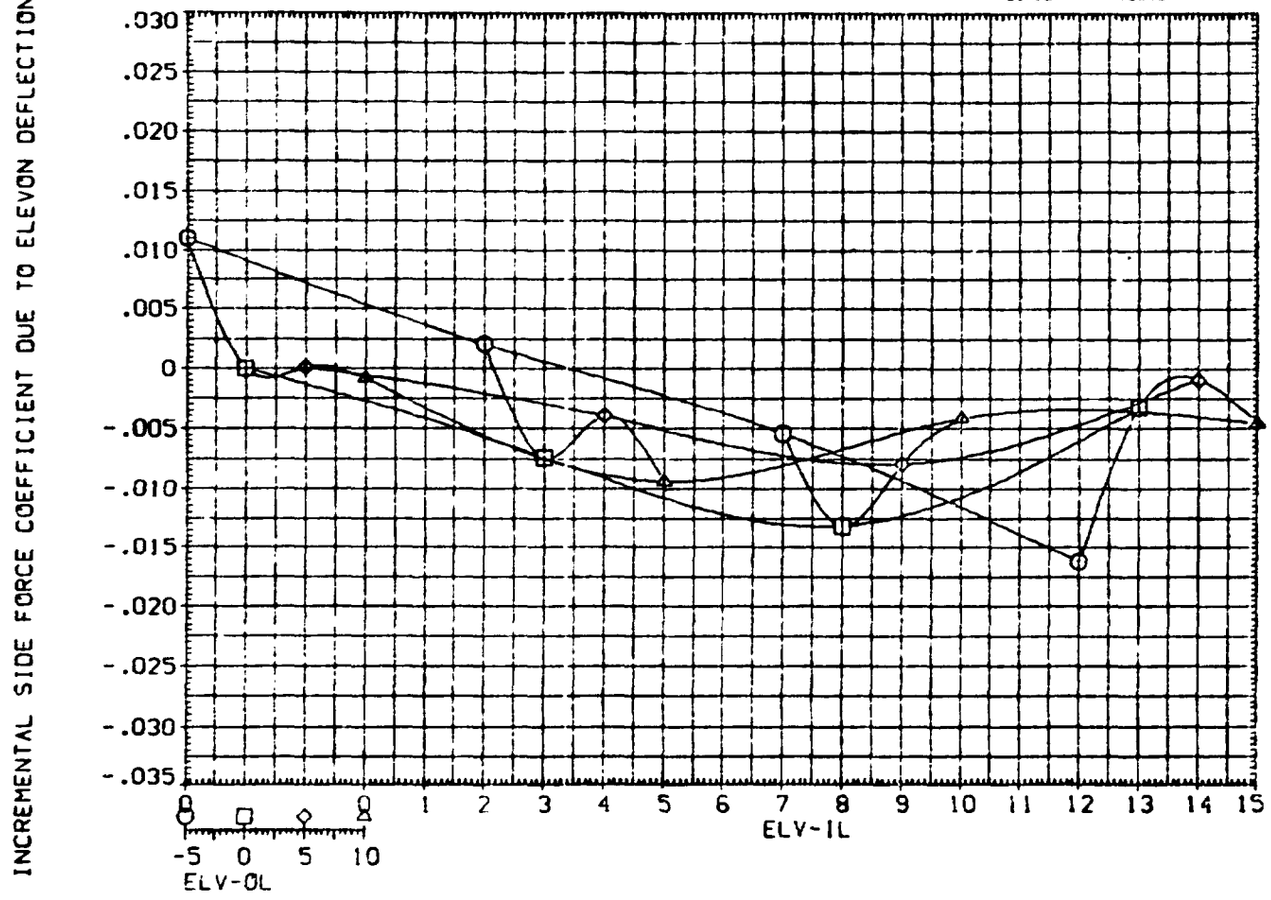
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA= 0.0 (BINCSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	7690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

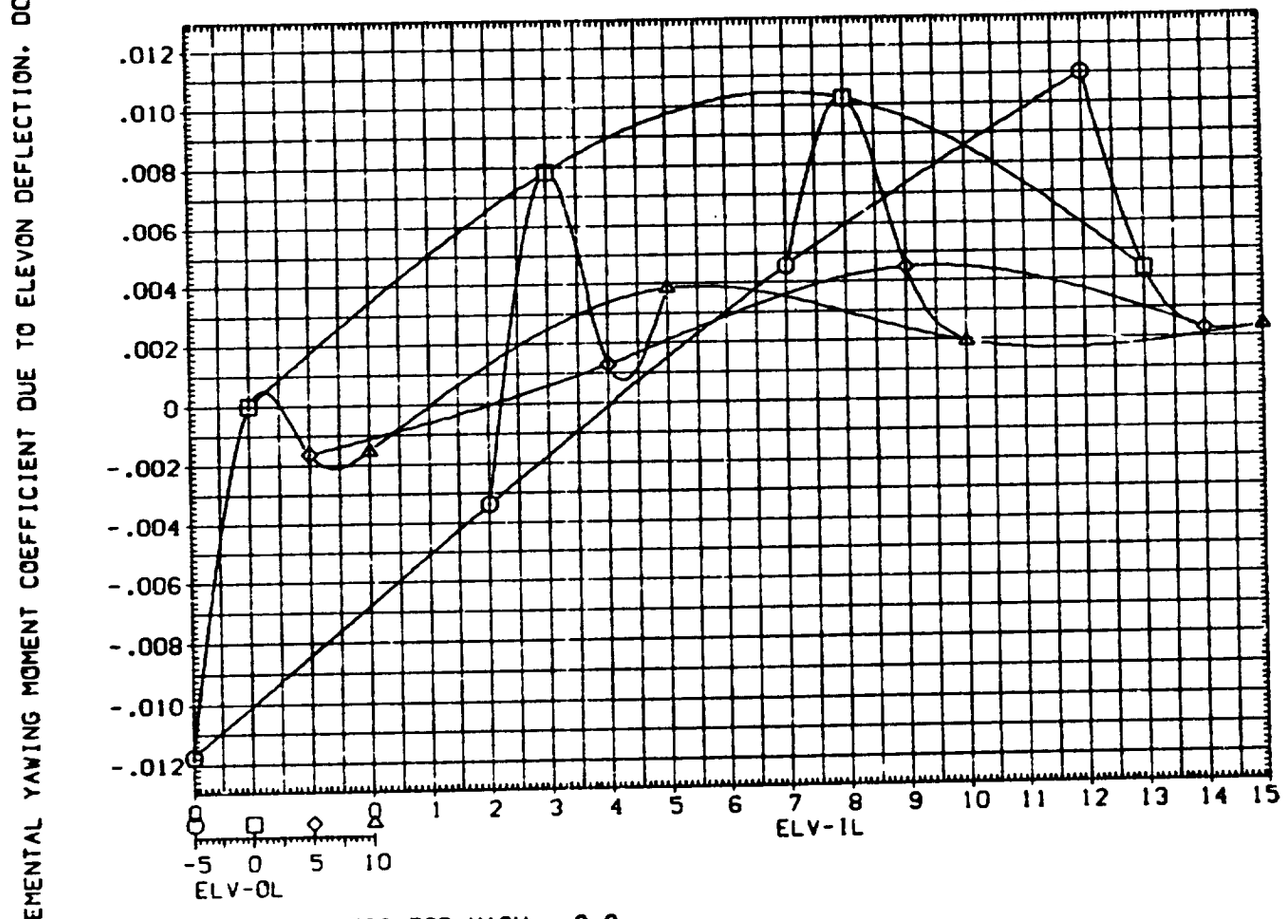
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA= 0.0 (BINCSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	.900	ELV-IR	.300
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

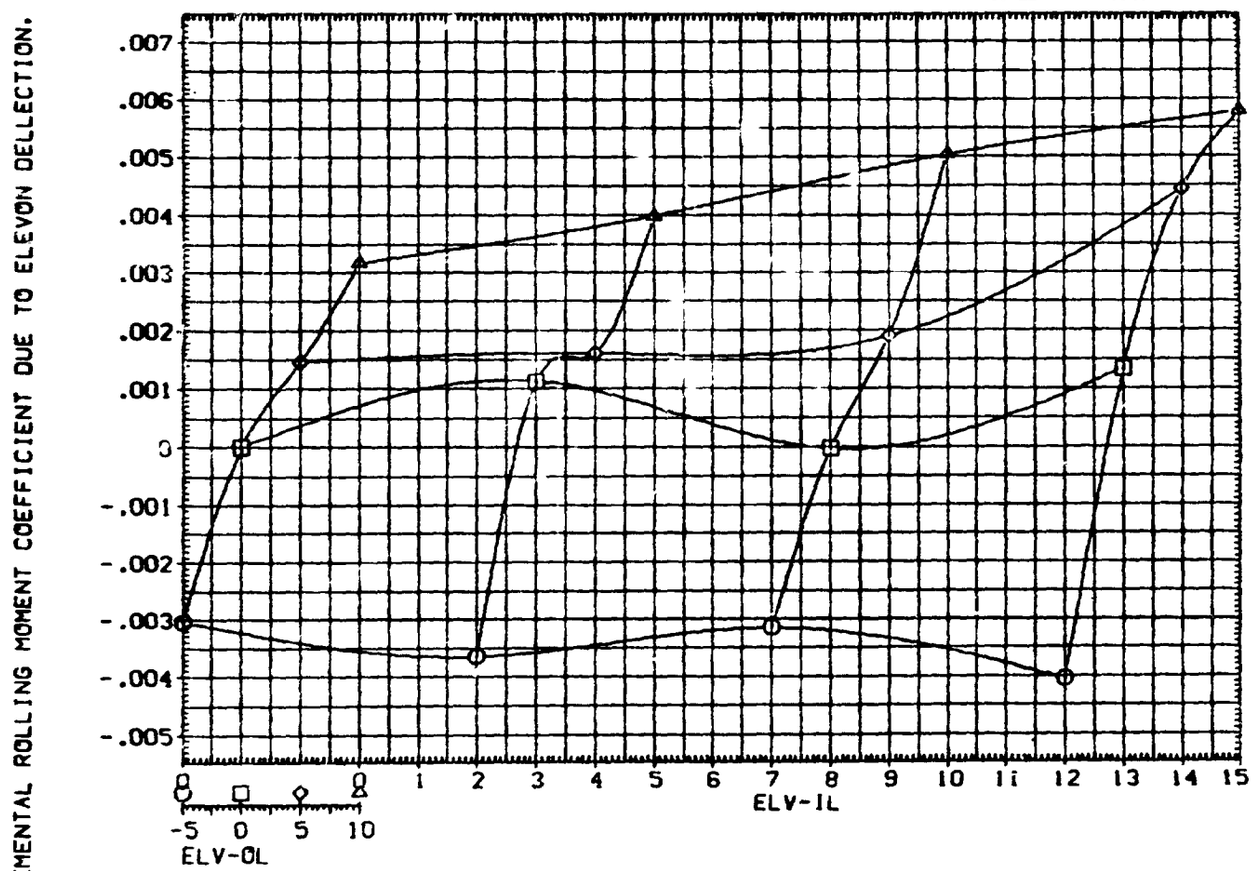
MSFC TWT 622 (IA125) 74 OTS. M= 0.9, ALPHA= 0.0 (B1NCSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

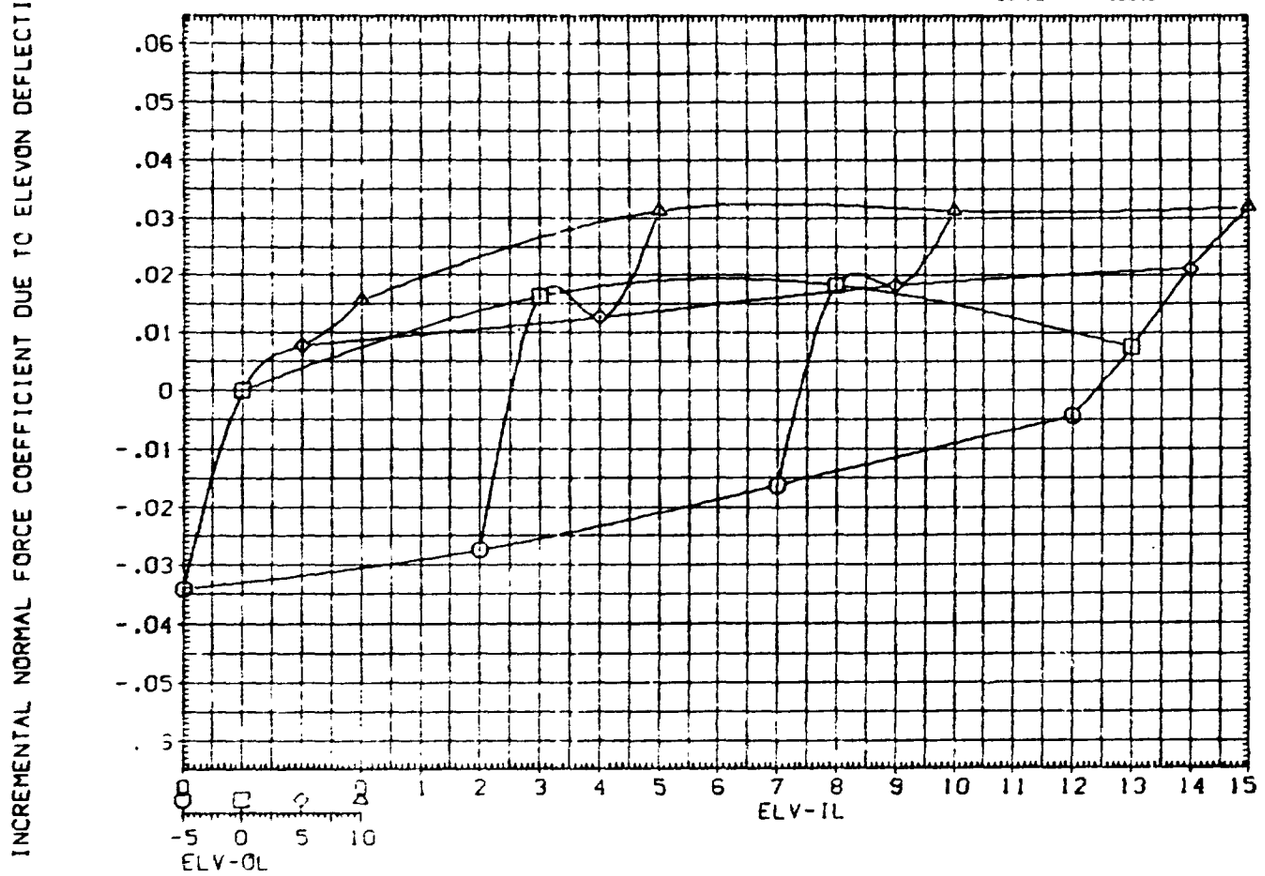
MSFC TWT 622 (!A125) 74 OTS. M= 0.9, ALPHA= 2.0 (BINCSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

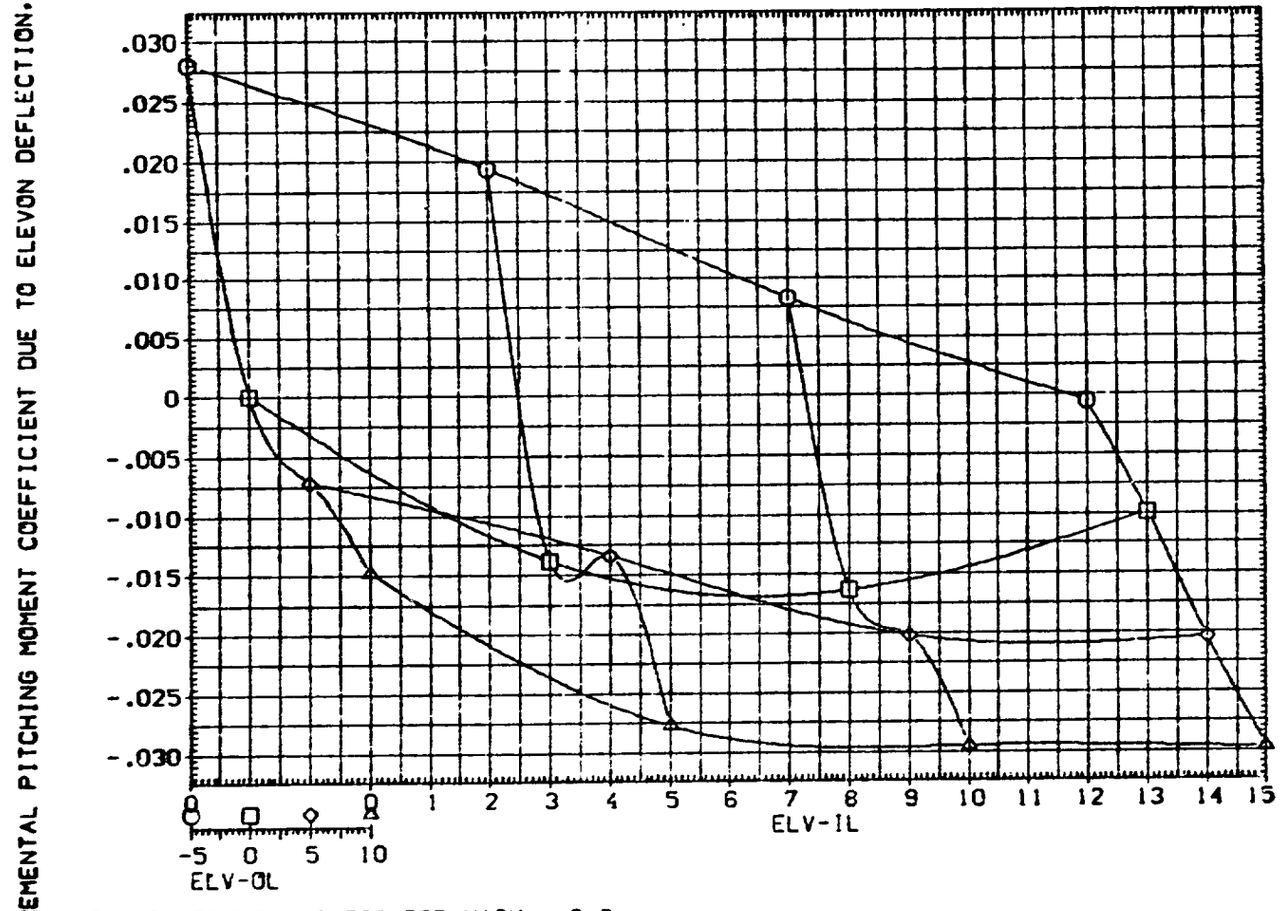
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 2.0 (BINCSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

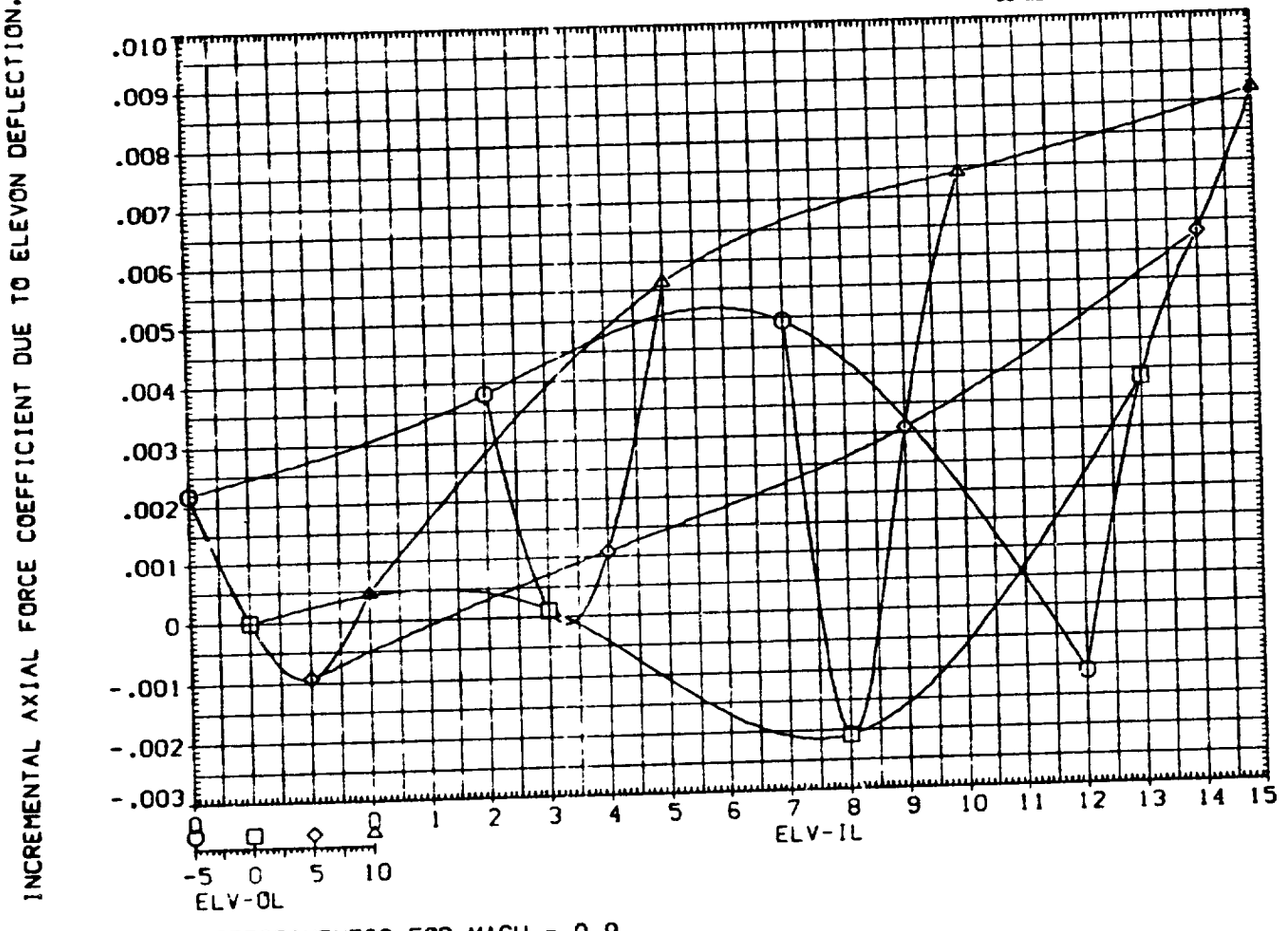
MSFC TWT 622 (1A125) 74 OTS, M= 0.9, ALPHA= 2.0 (BINCSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

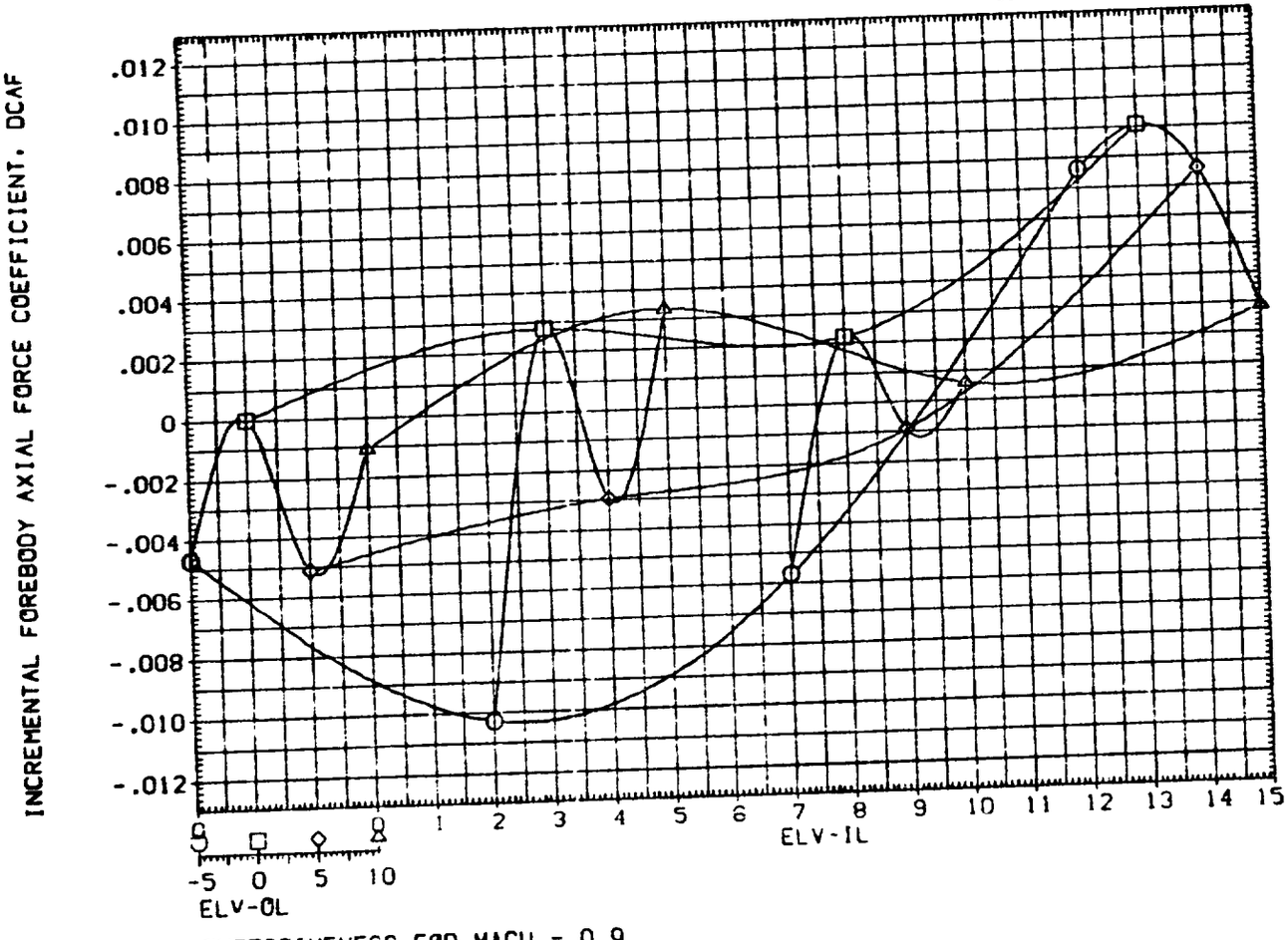
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 2.0 (BINCSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

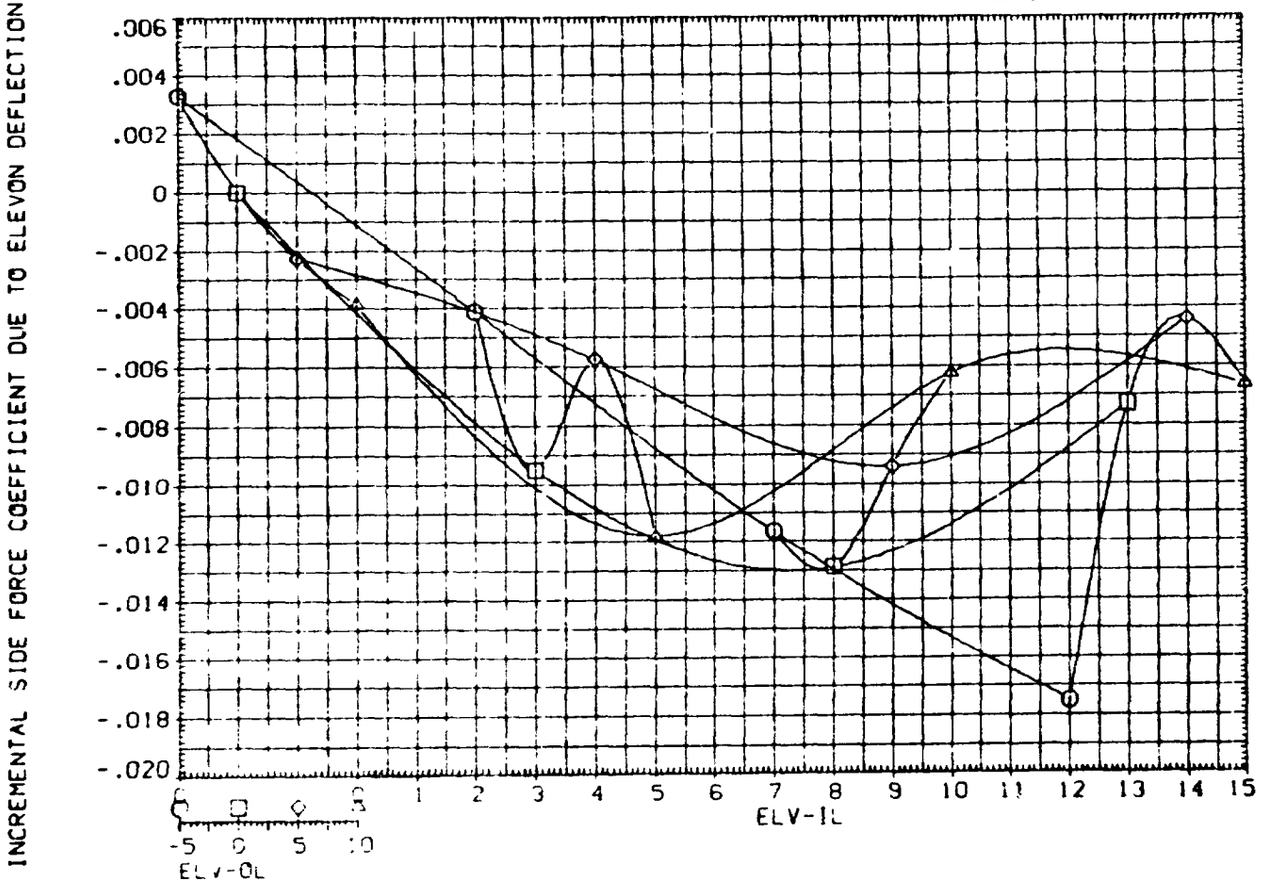
MSFC TWT 622 (1A125) 74 OTS, M= 0.9, ALPHA = 2.0 (B1NCSG)

PARAMETRIC VALUES

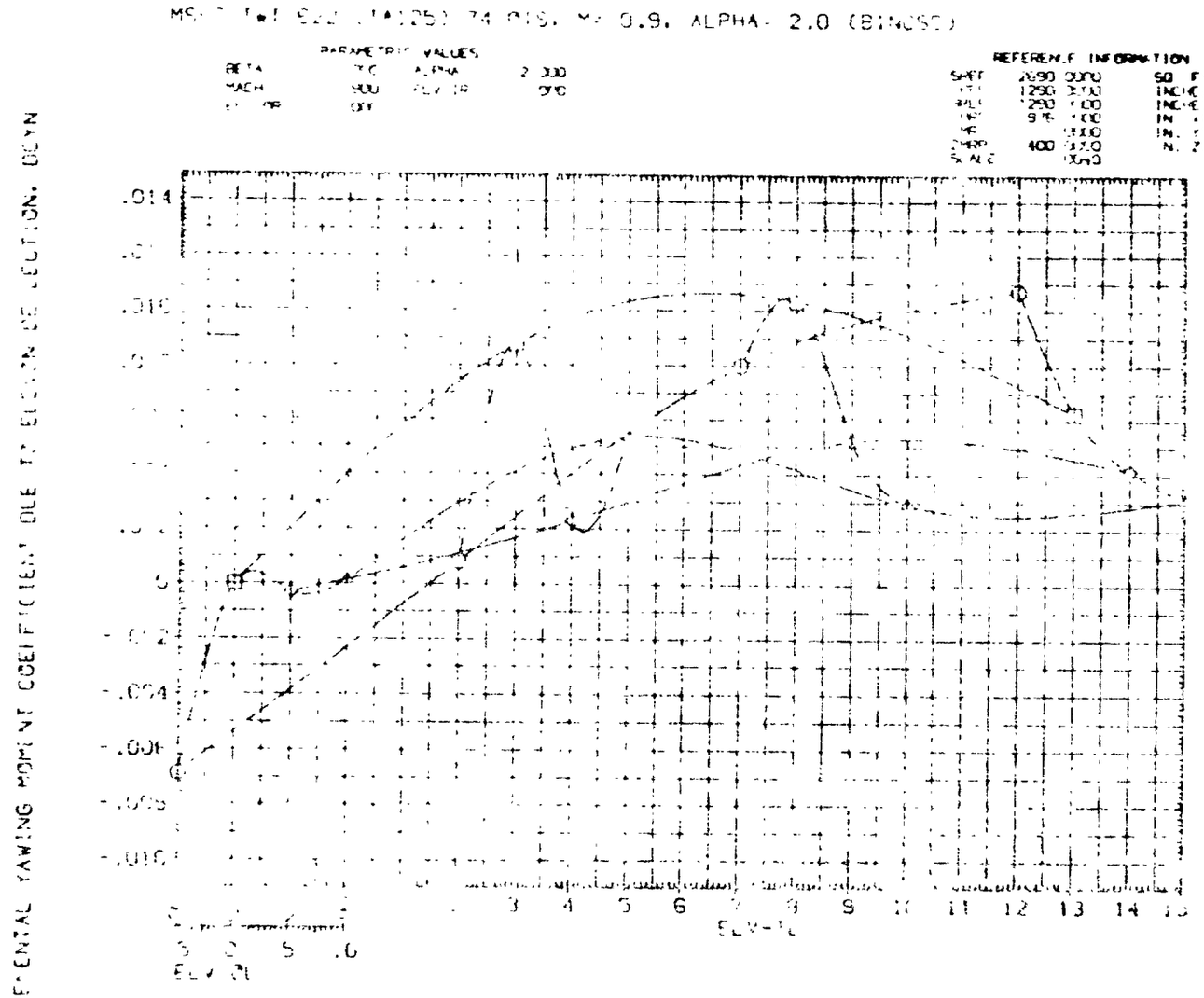
BETA	.000	ALPHA	2.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9



ELEVON EFFECTIVENESS FOR MACH = 0.9

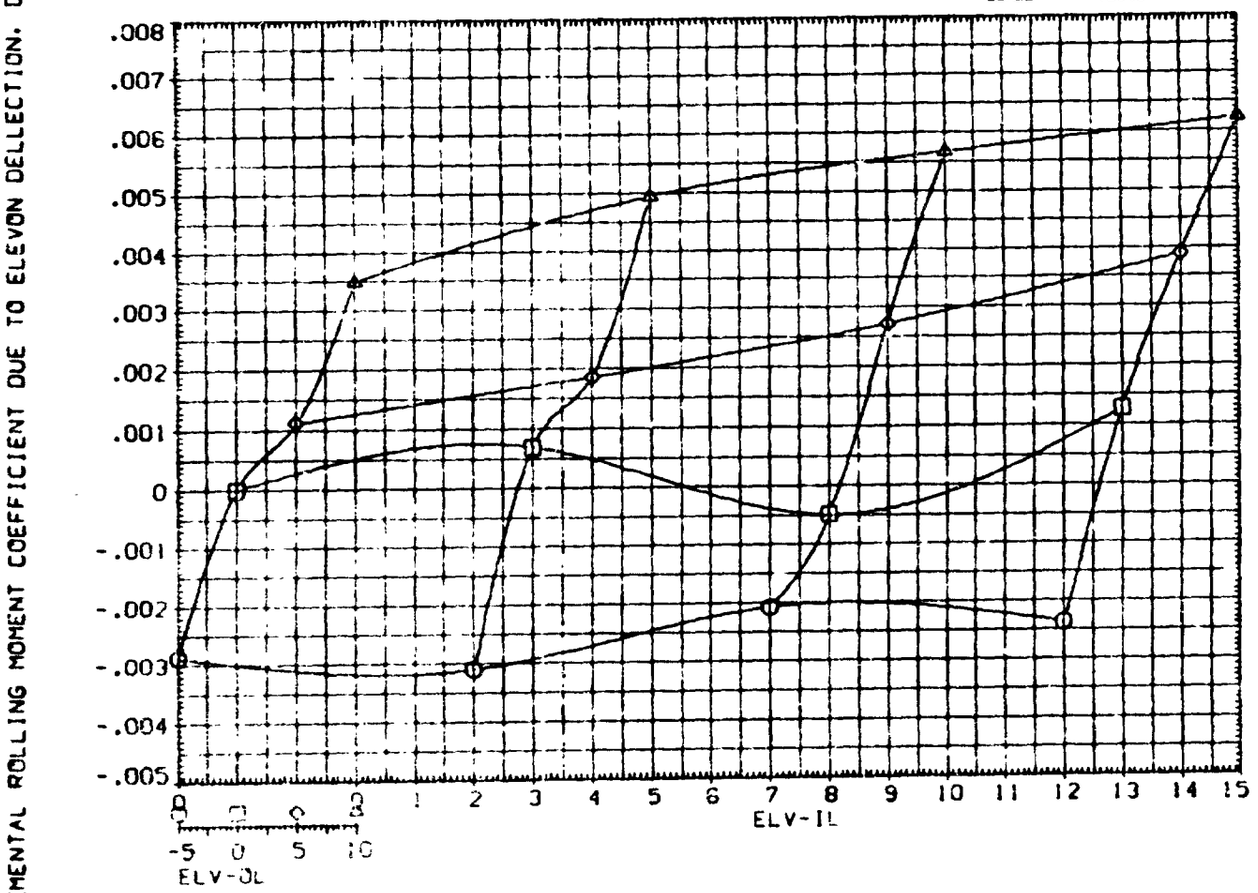
MSFC TWT 622 (IA125) 74 OTS. M= 0.9, ALPHA= 2.0 (BINCSG)

PARAMETRIC VALUES

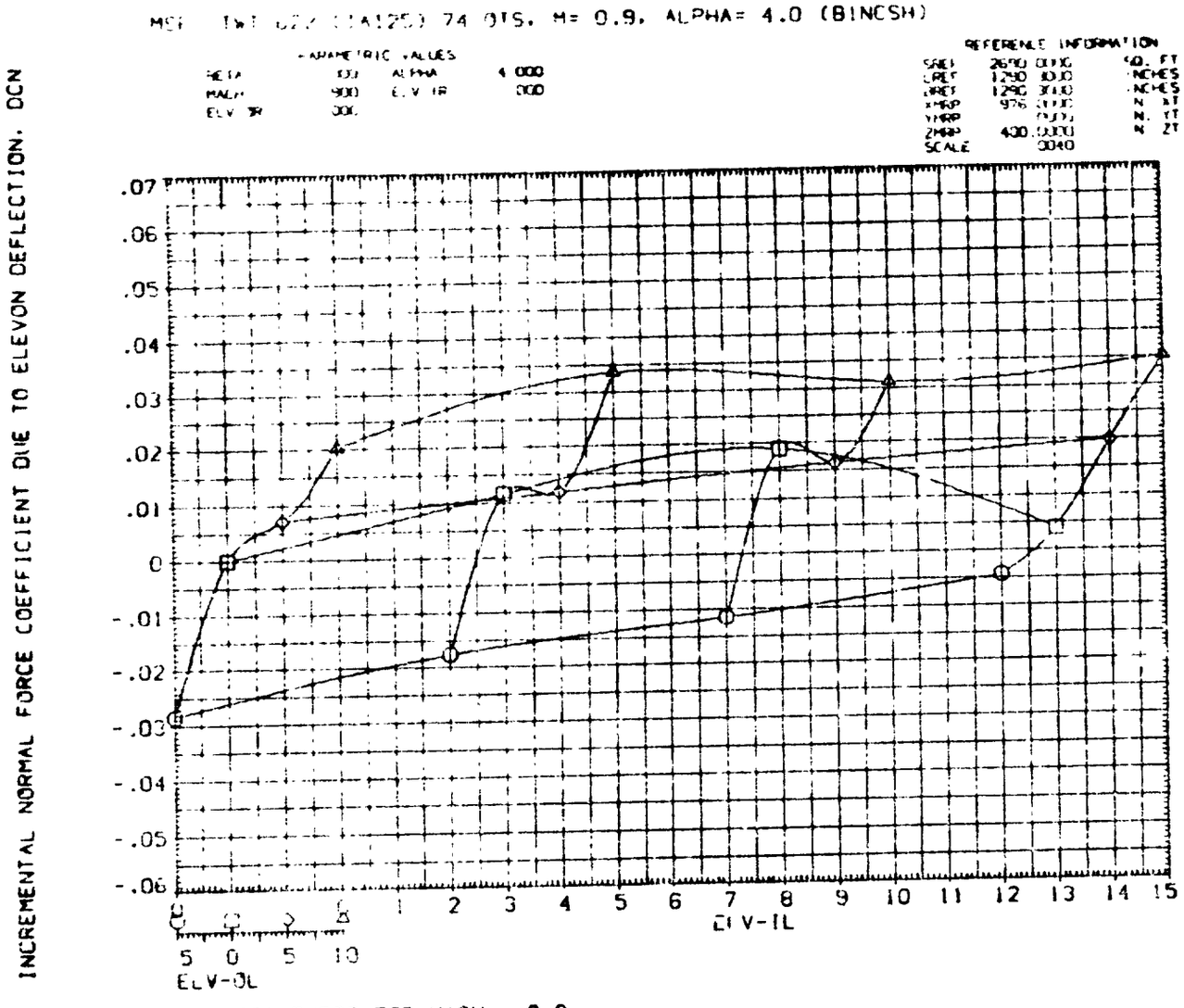
BETA	000	ALPHA	2.000
MACH	900	ELV-1R	000
ELV-OR	000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9



ELEVON EFFECTIVENESS FOR MACH = 0.9

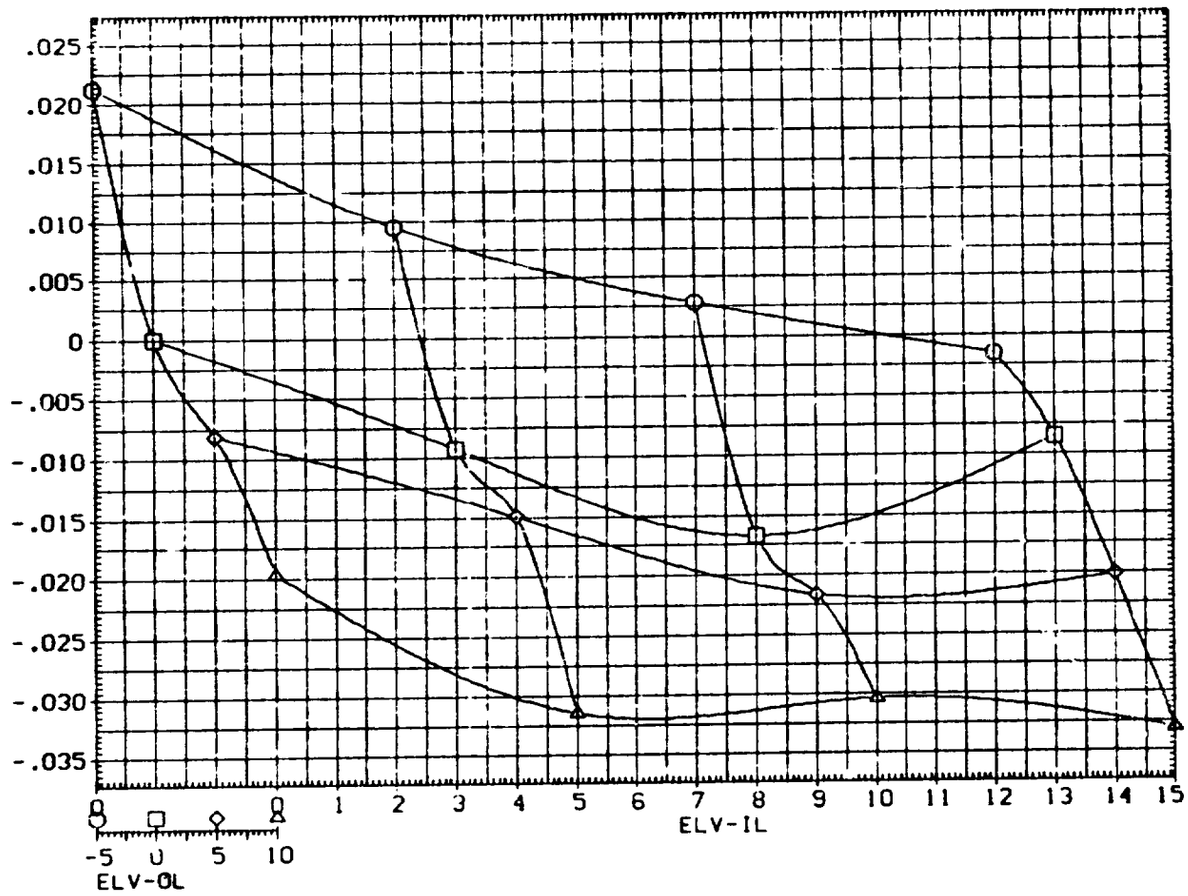
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 4.0 (BINCSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2090.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

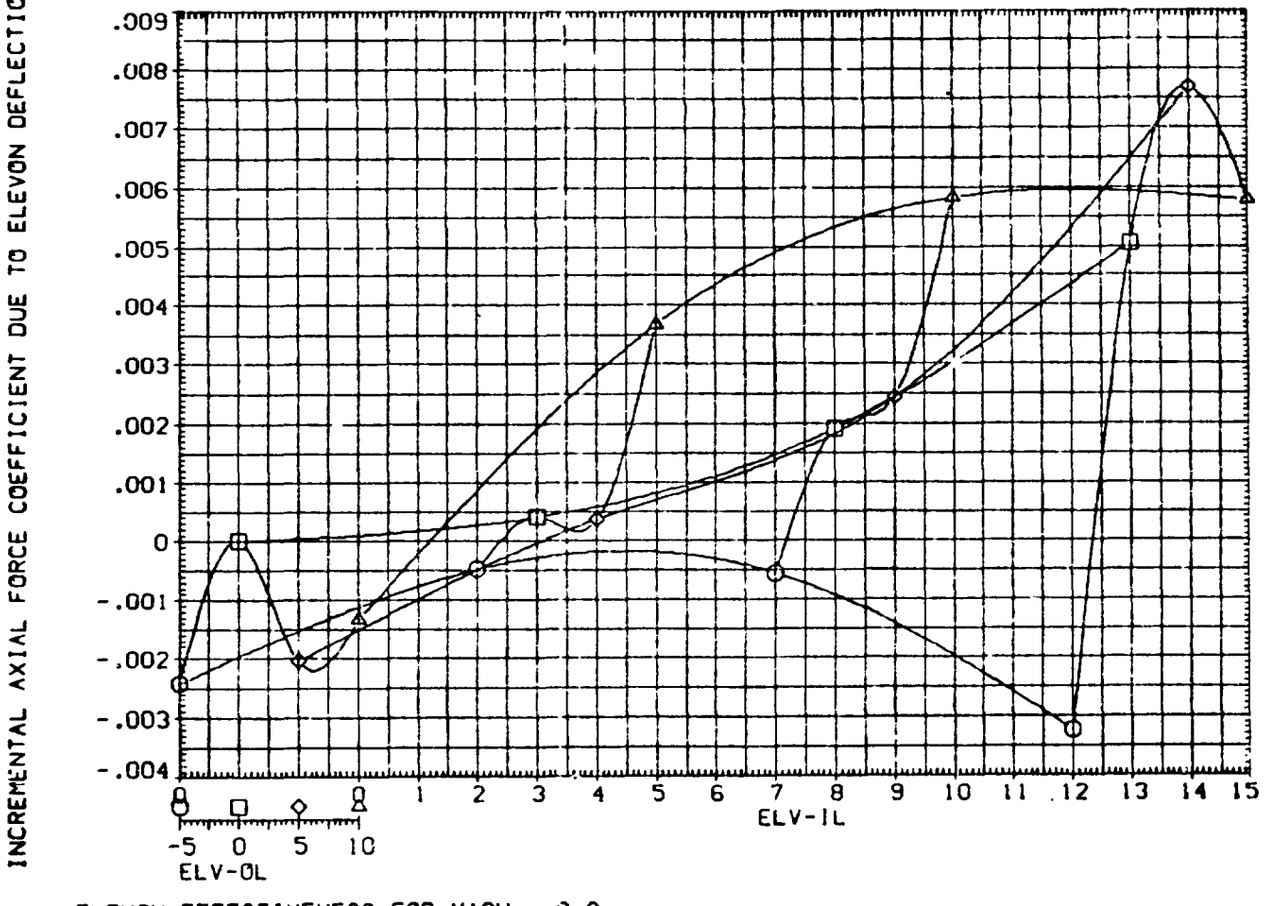
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA= 4.0 (BINCSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1250.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

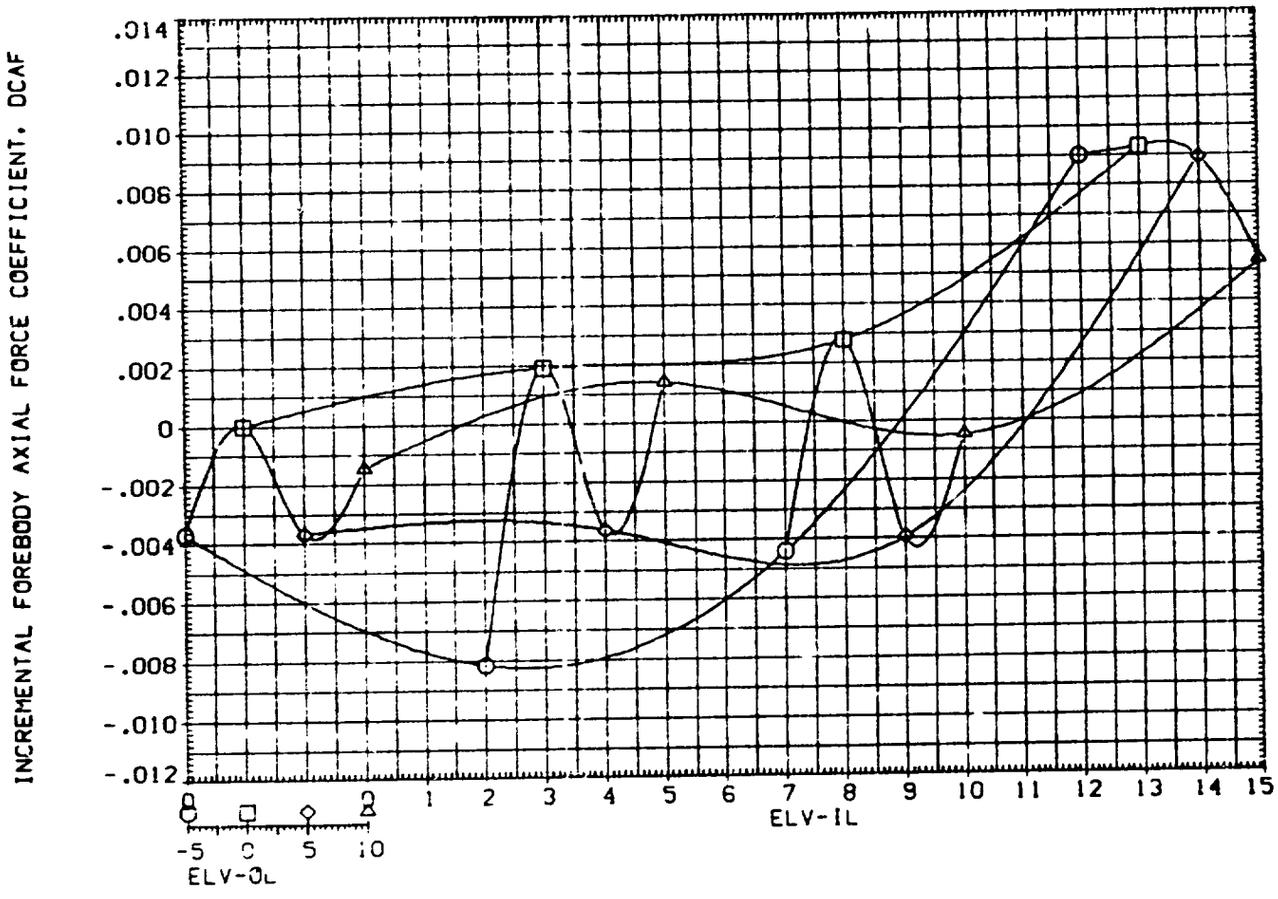
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 4.0 (BINCSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

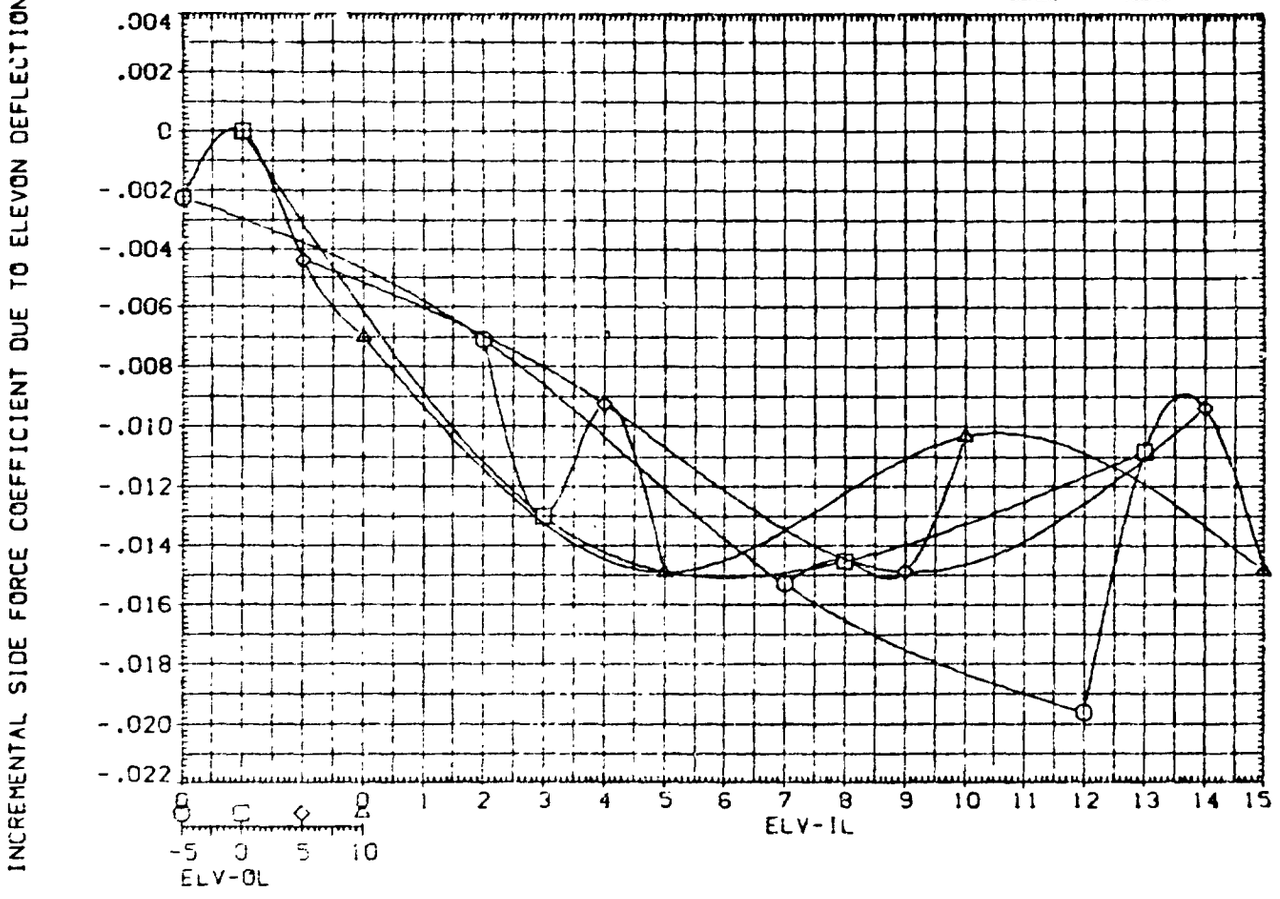
MSFC TWT 622 (IA125, 74 OTS. M= 0.9. ALPHA= 4.0 (BINCSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

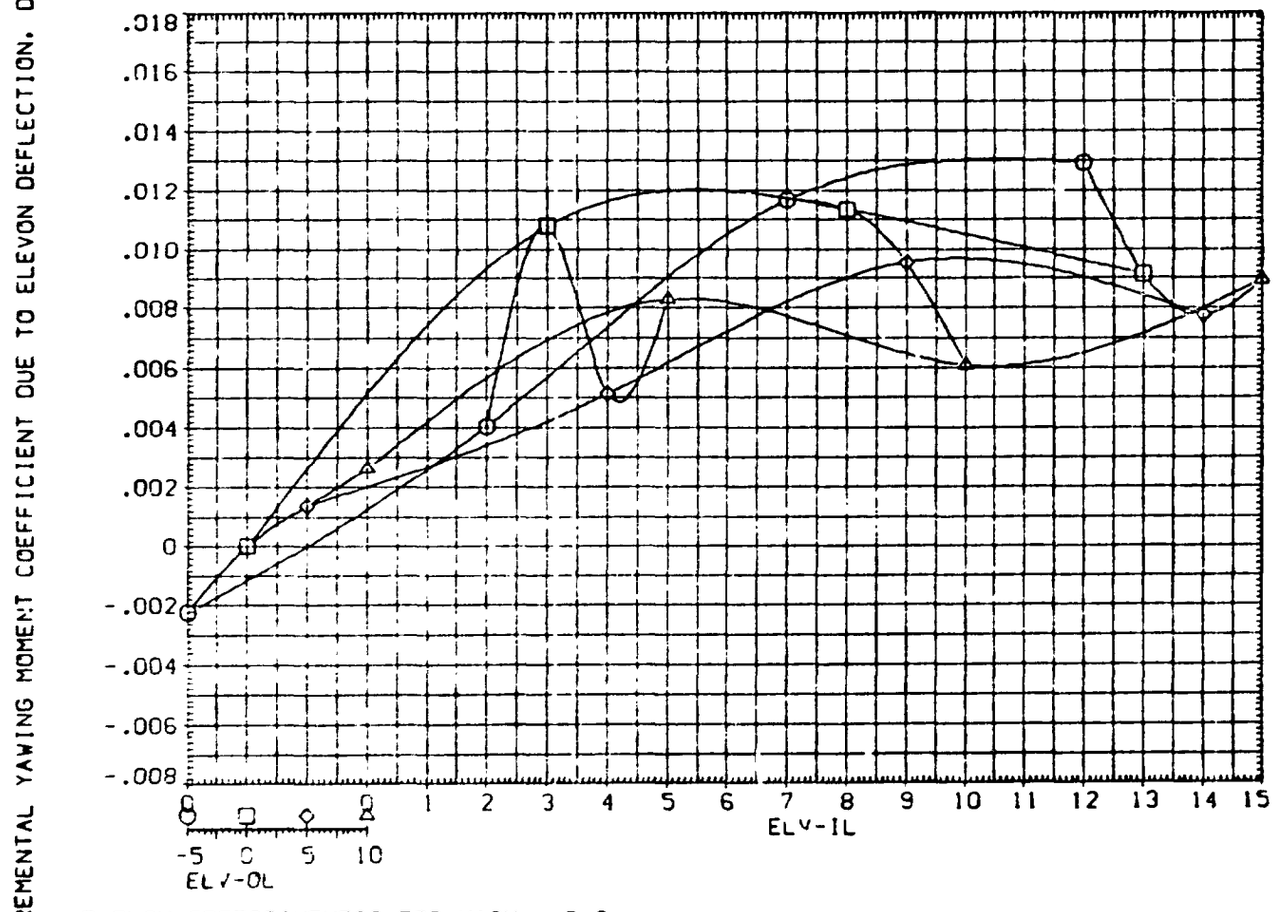
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA= 4.0 (BINCSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

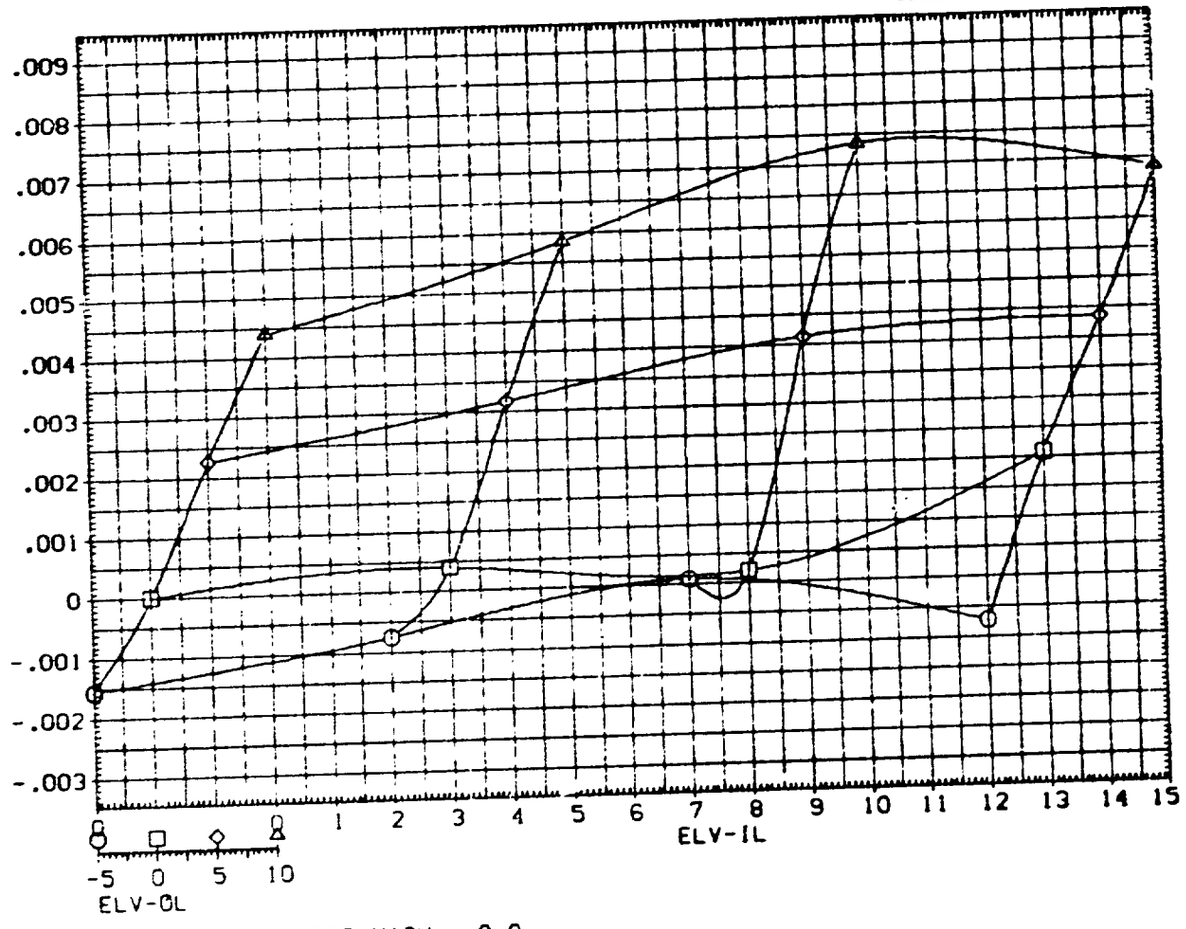
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 4.0 (BINCSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

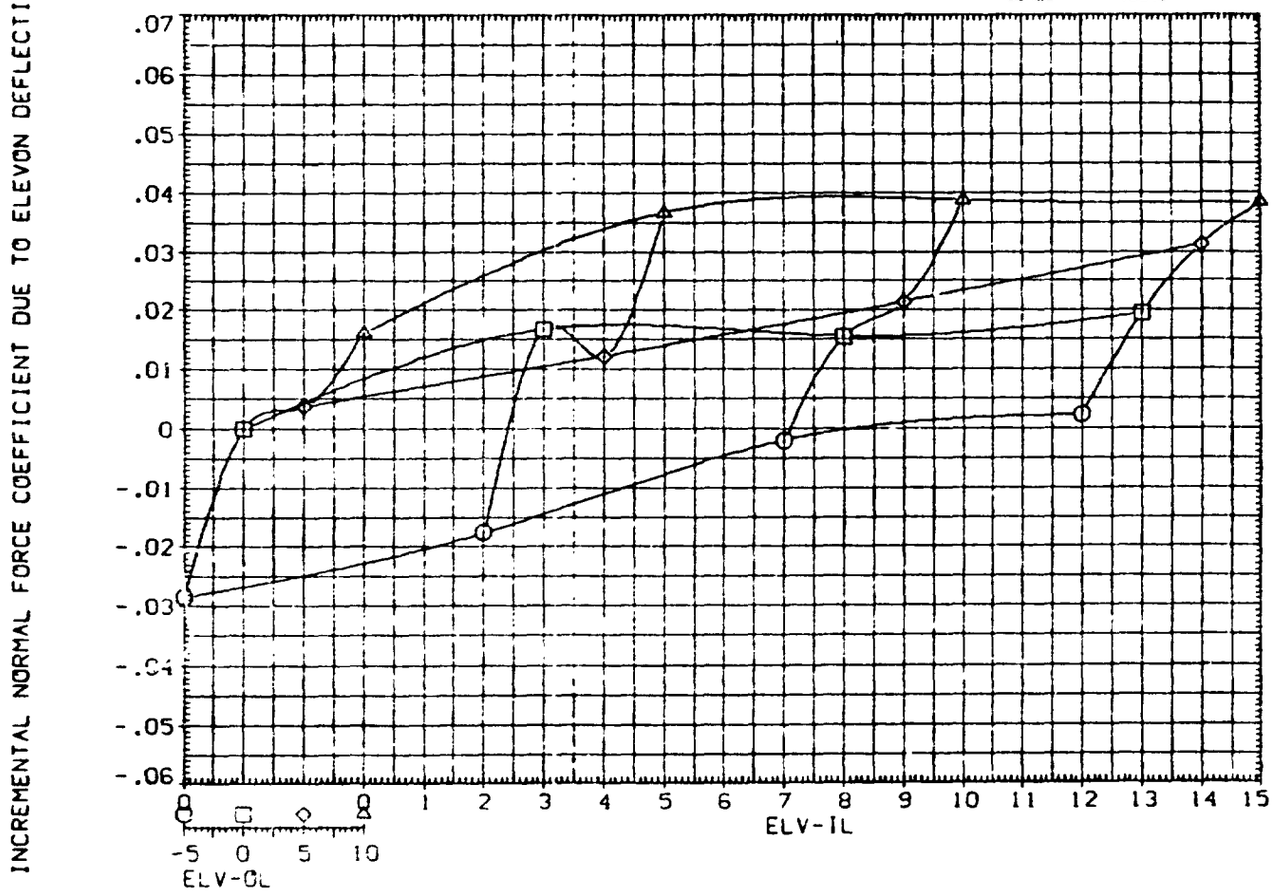
MSFC TWT 622 (IA125) 74 OTS. M= 0.9, ALPHA= 6.0 (BINCSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

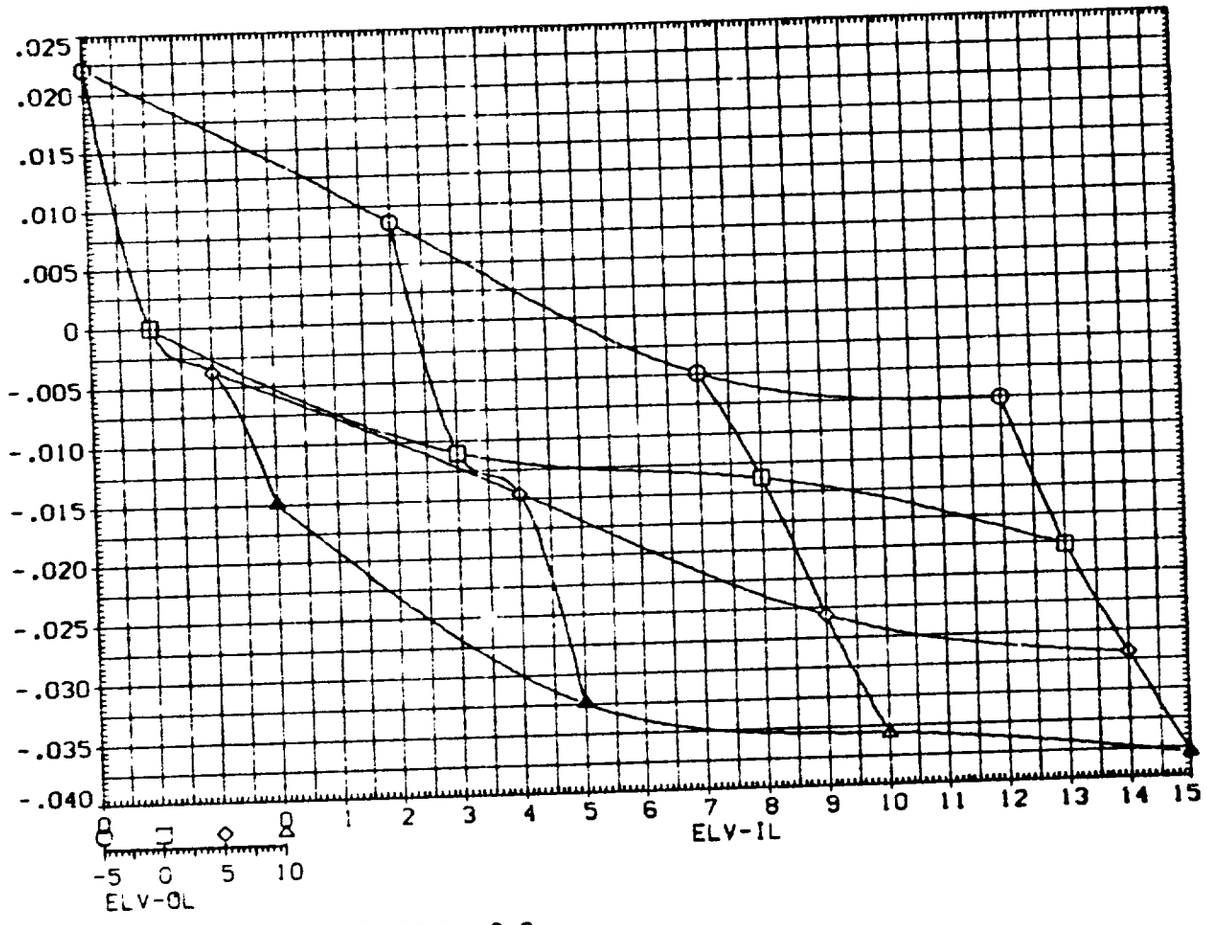
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA= 6.0 (BINCSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

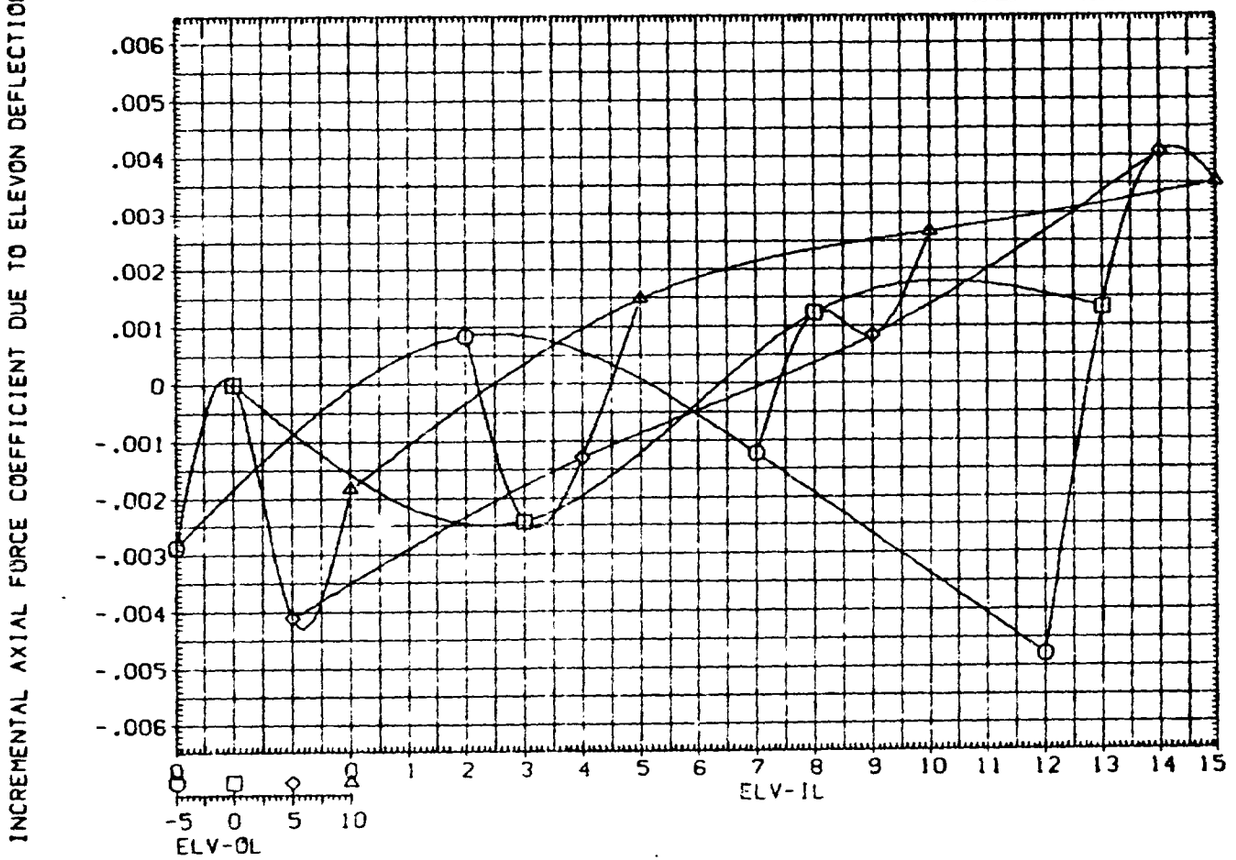
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 6.0 (BINCSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

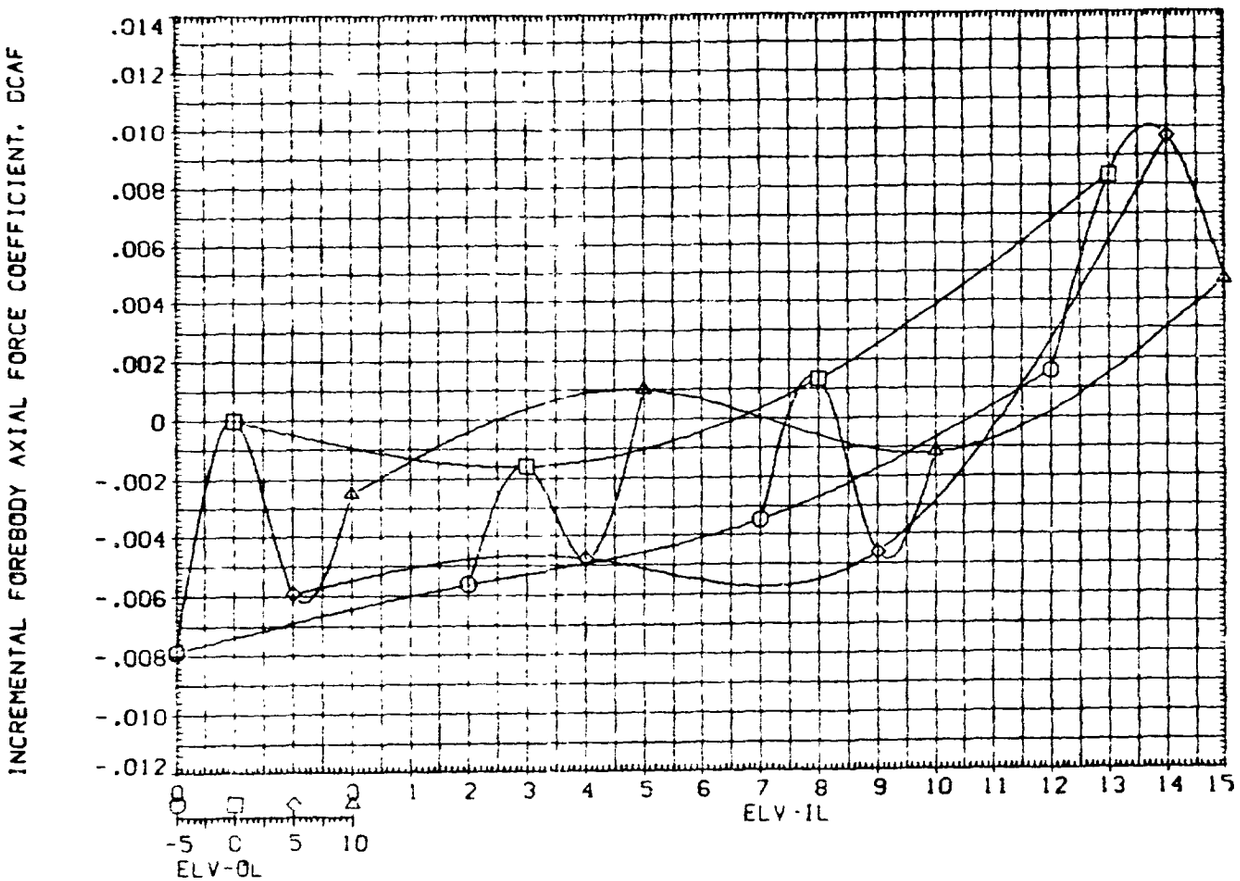
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 6.0 (BINCSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

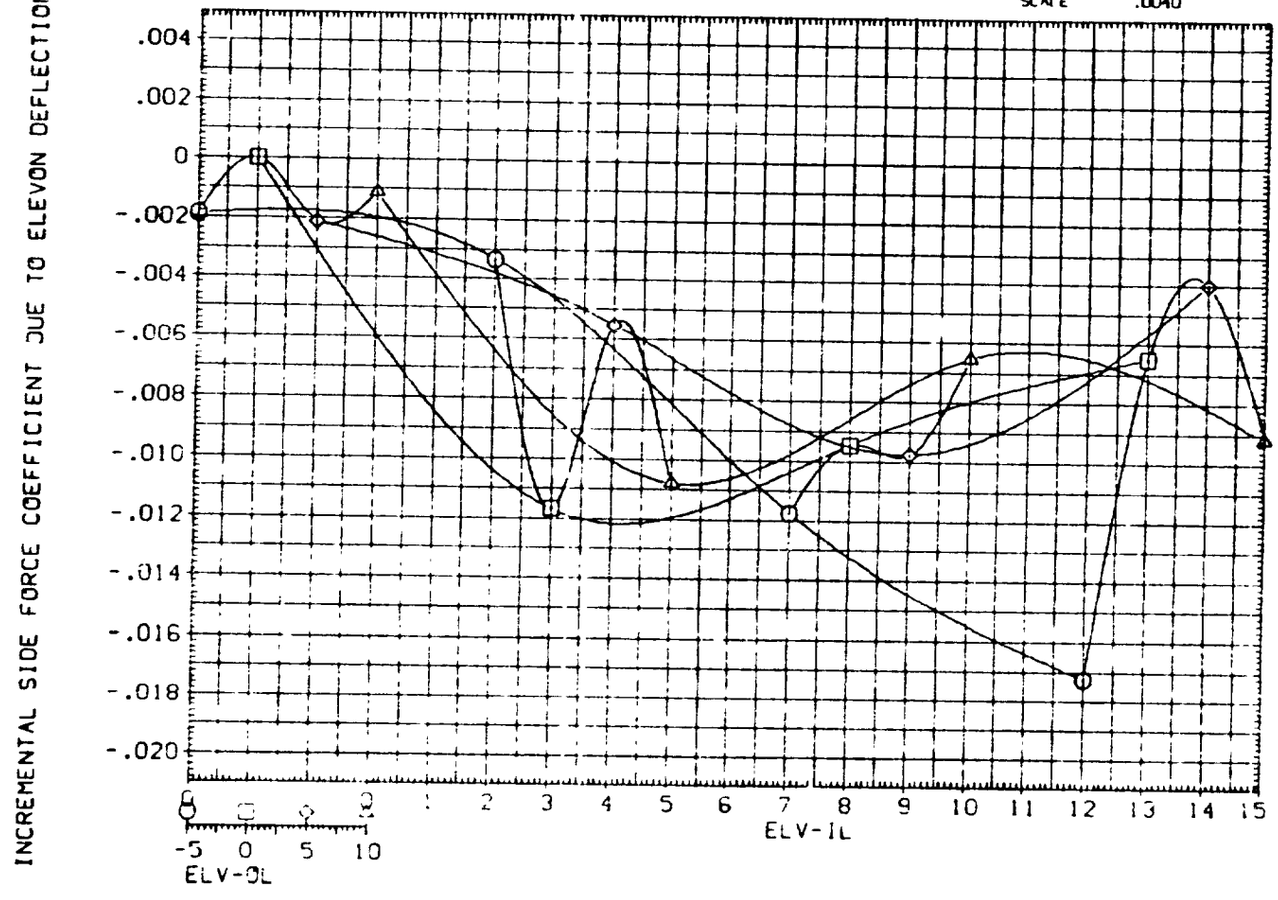
MSFC TWT 622 (IA125) 74 OTS. M= 0.9, ALPHA= 6.0 (BINCSI)

PARAMETRIC VALUES

BETA	000	ALPHA	6 000
MACH	.900	ELV-IR	000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690 0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

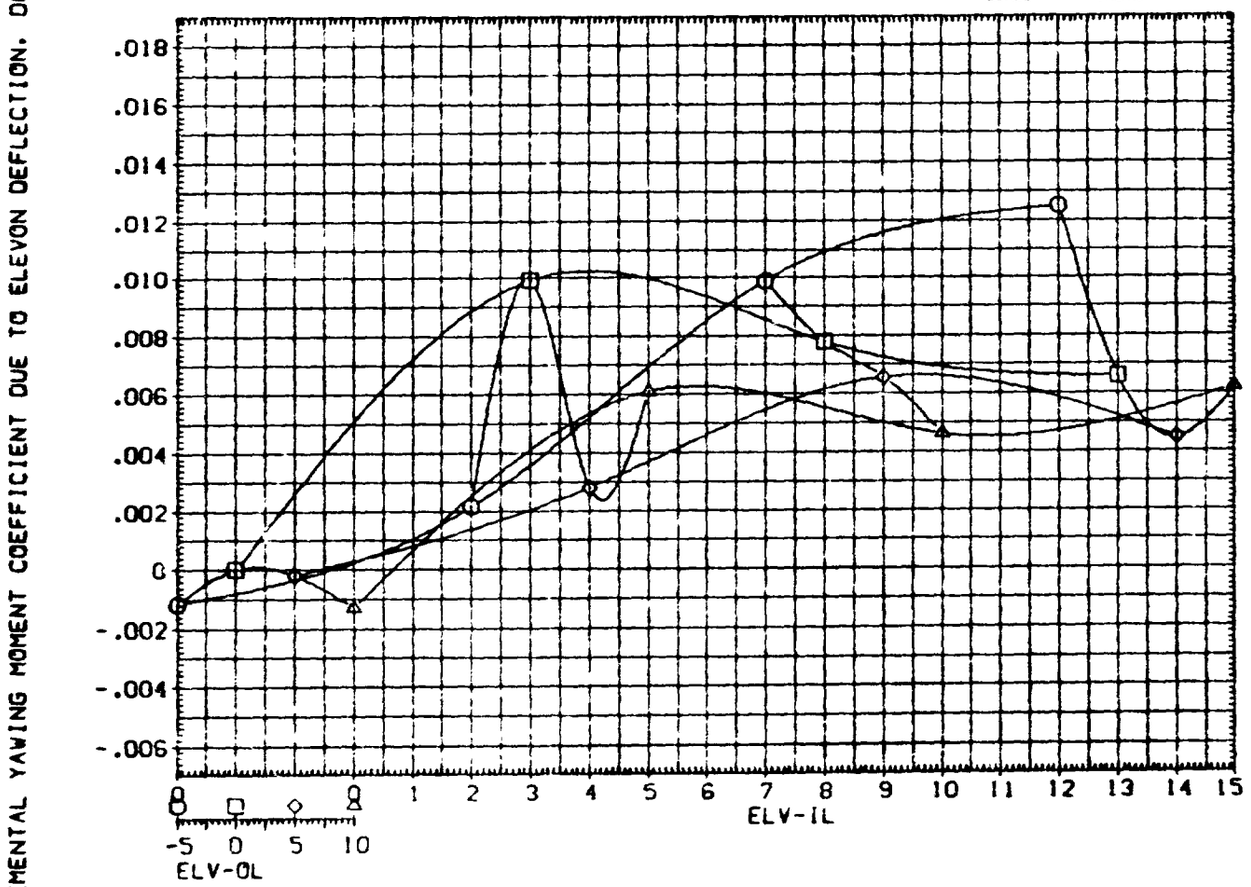
MSFC TWT 622 (!A125) 74 OTS. M= 0.9, ALPHA= 6.0 (BINCS!)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

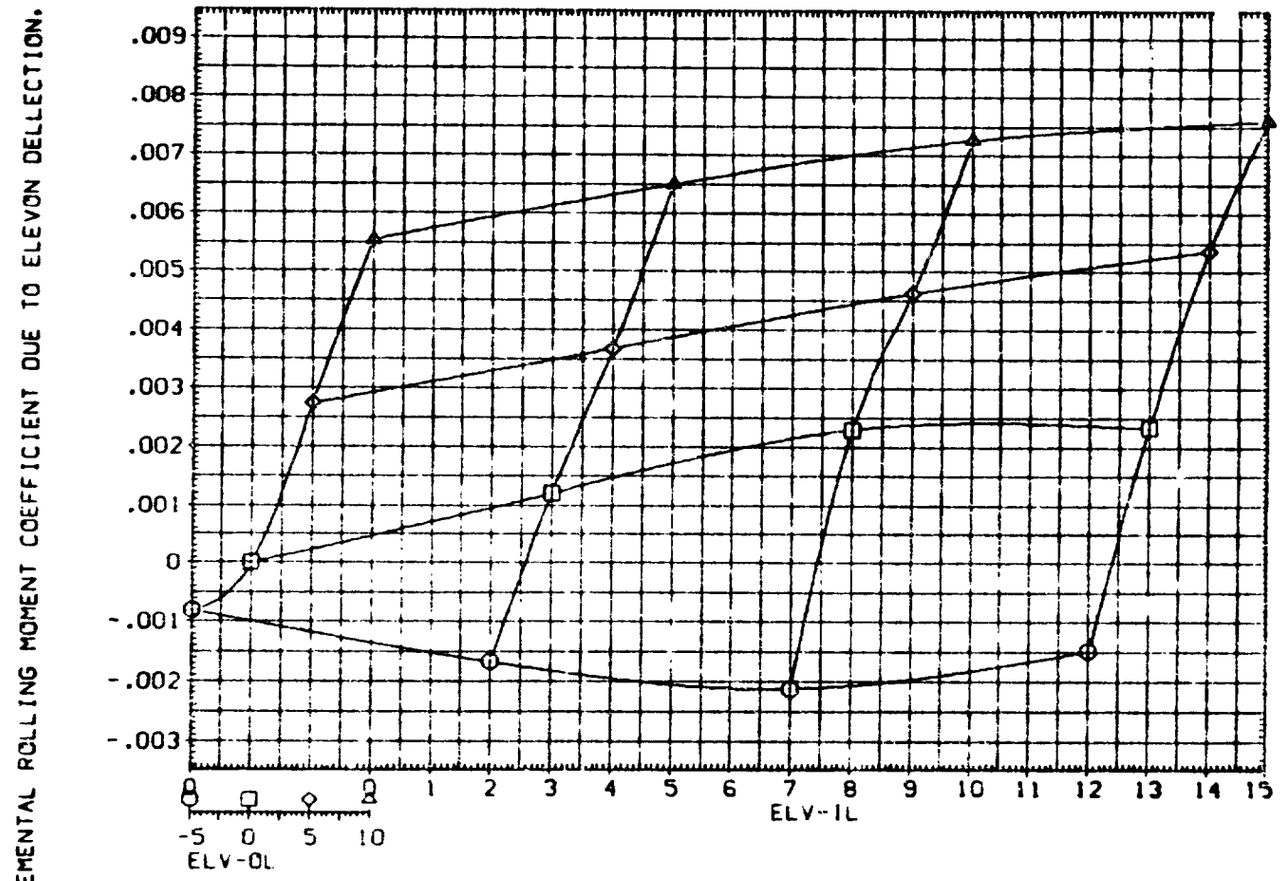
MSFC TWT 622 (IA125) 74 OTS. M= 0.9, ALPHA= 6.0 (BINCSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

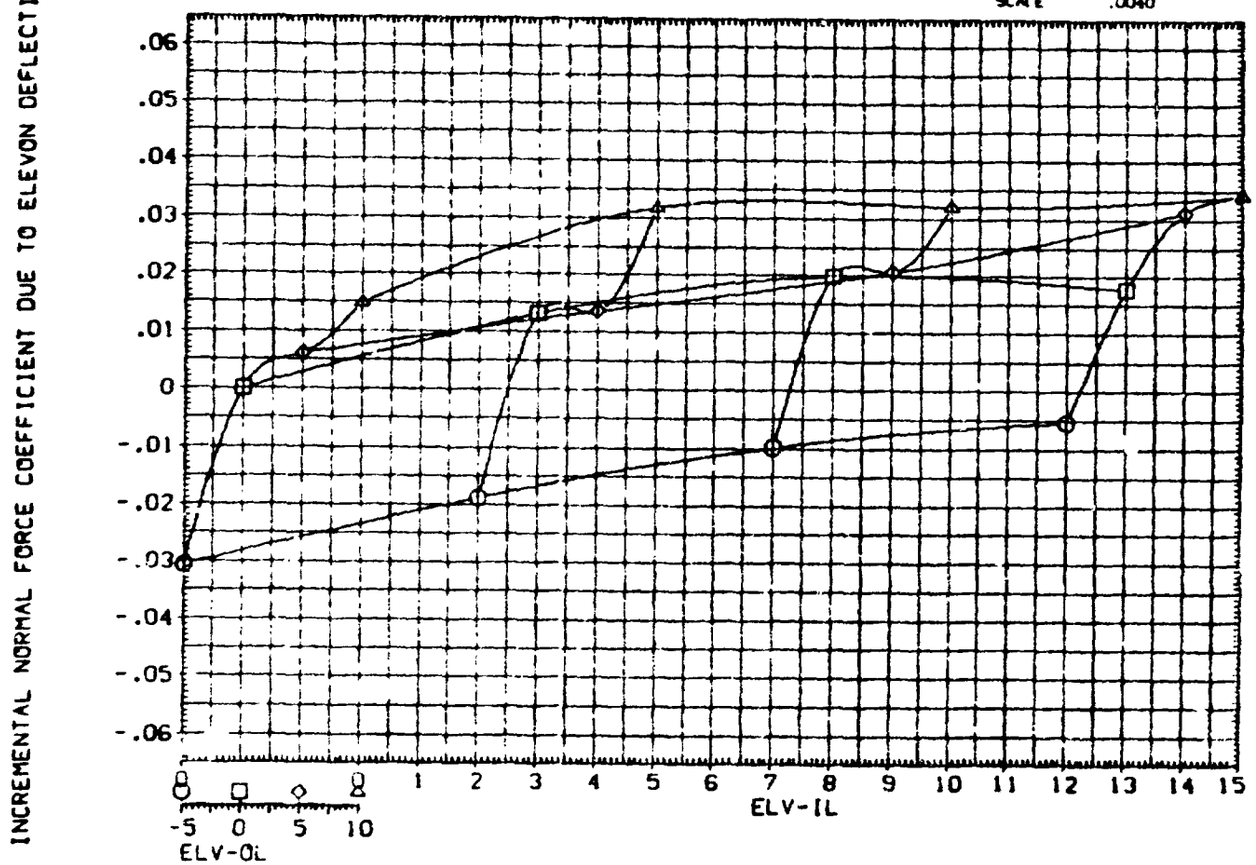
MSFC TWT 622 (!A125) 74 OTS. M= 0.9. ALPHA= 8.0 (B!NCSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

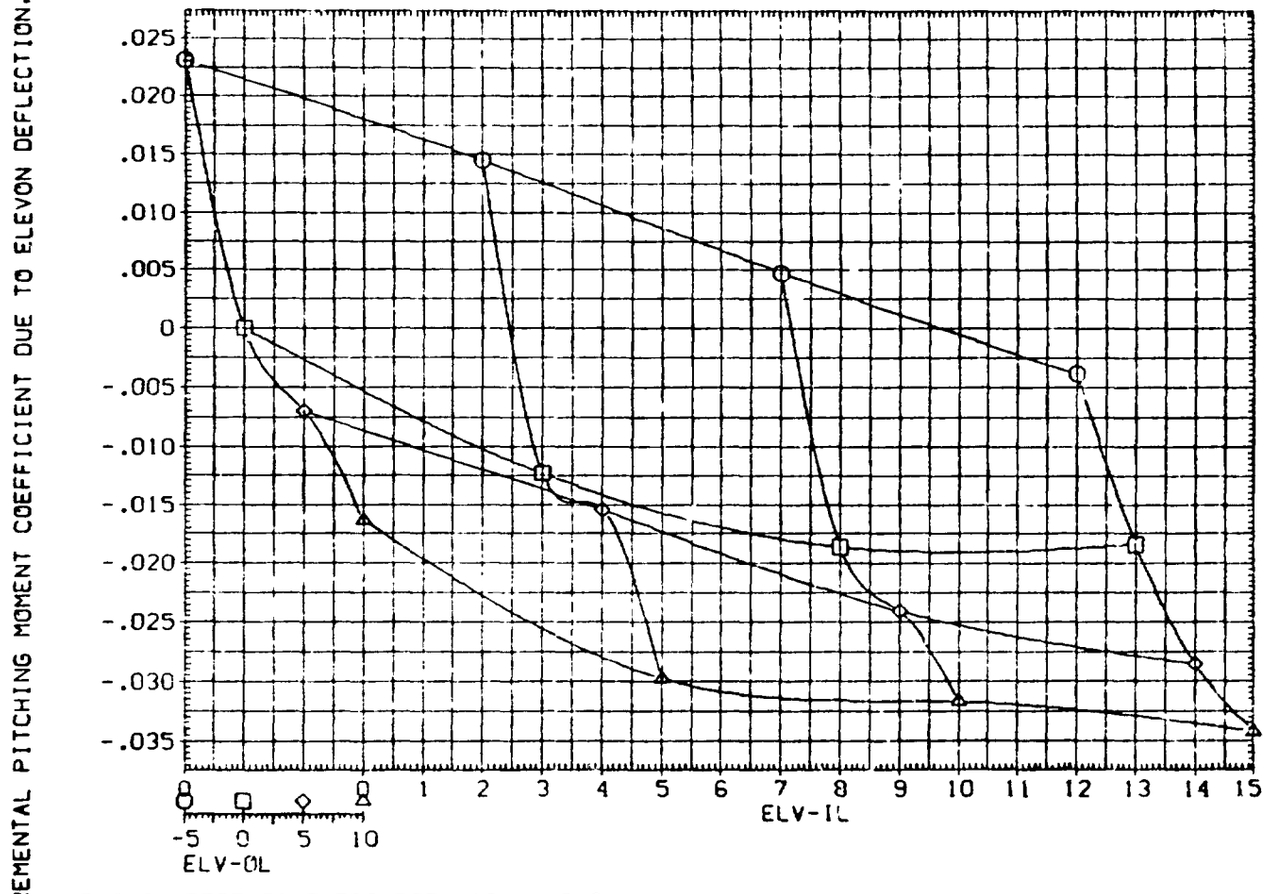
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA= 8.0 (BINCSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

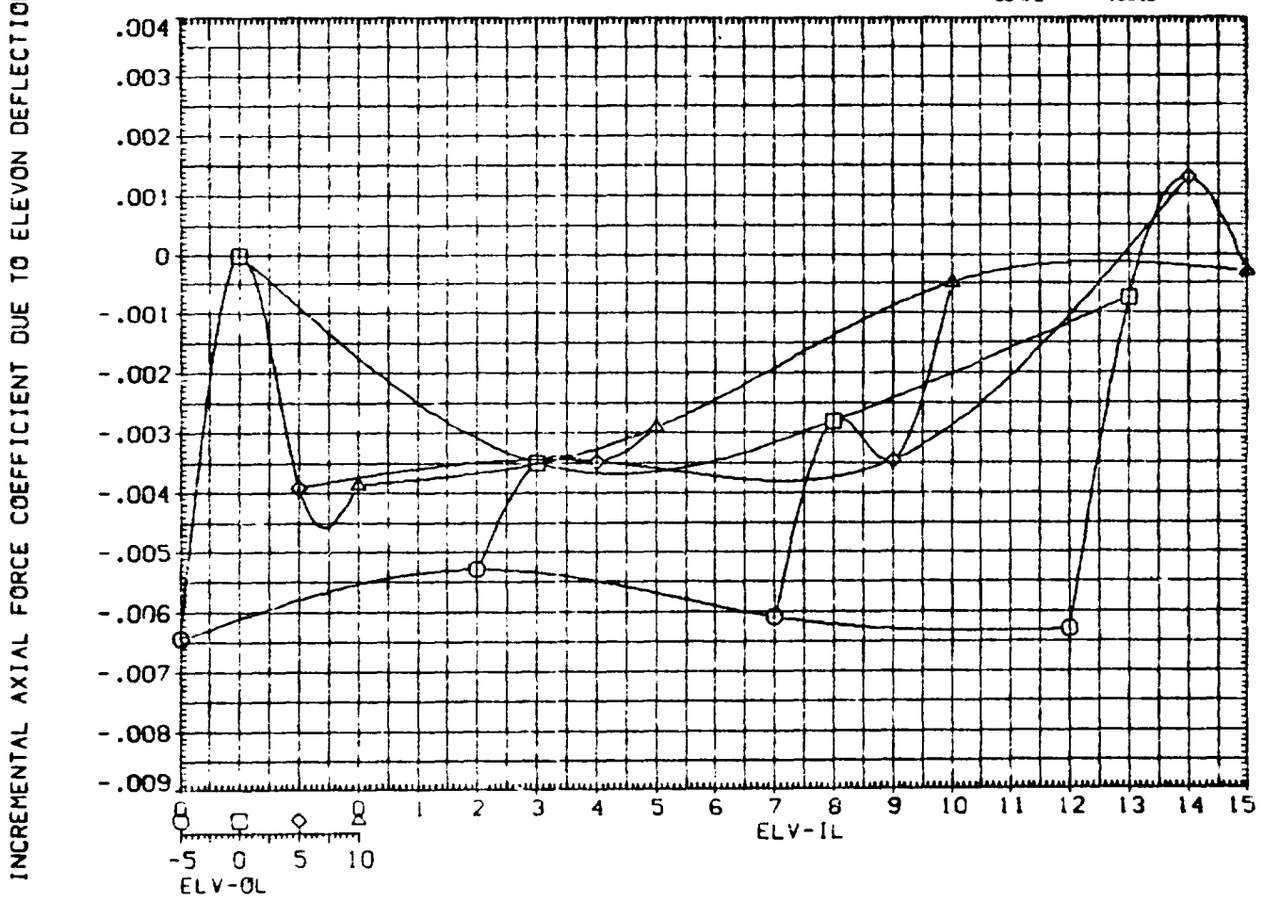
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA= 8.0 (B1NCSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2691.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

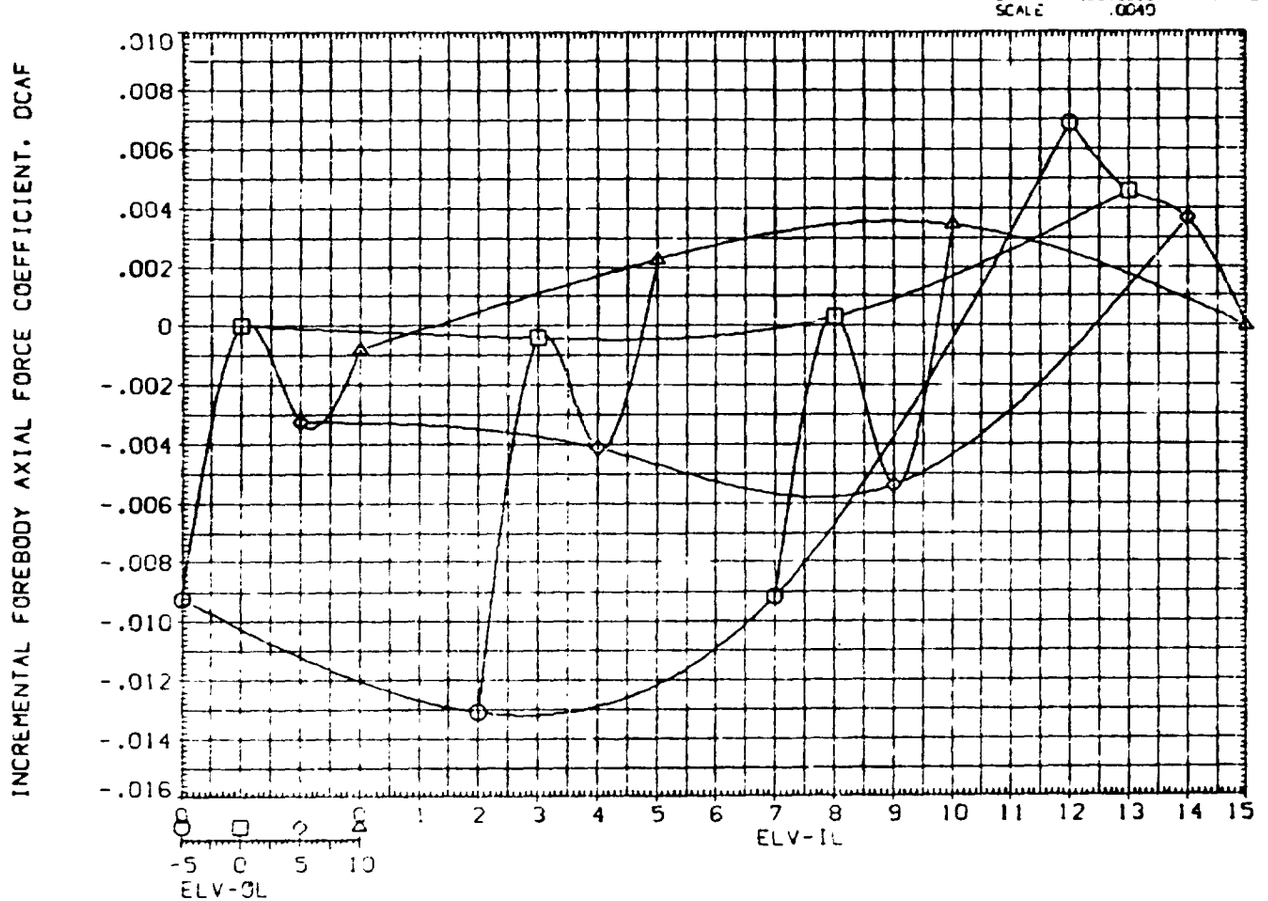
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 8.0 (BINCSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

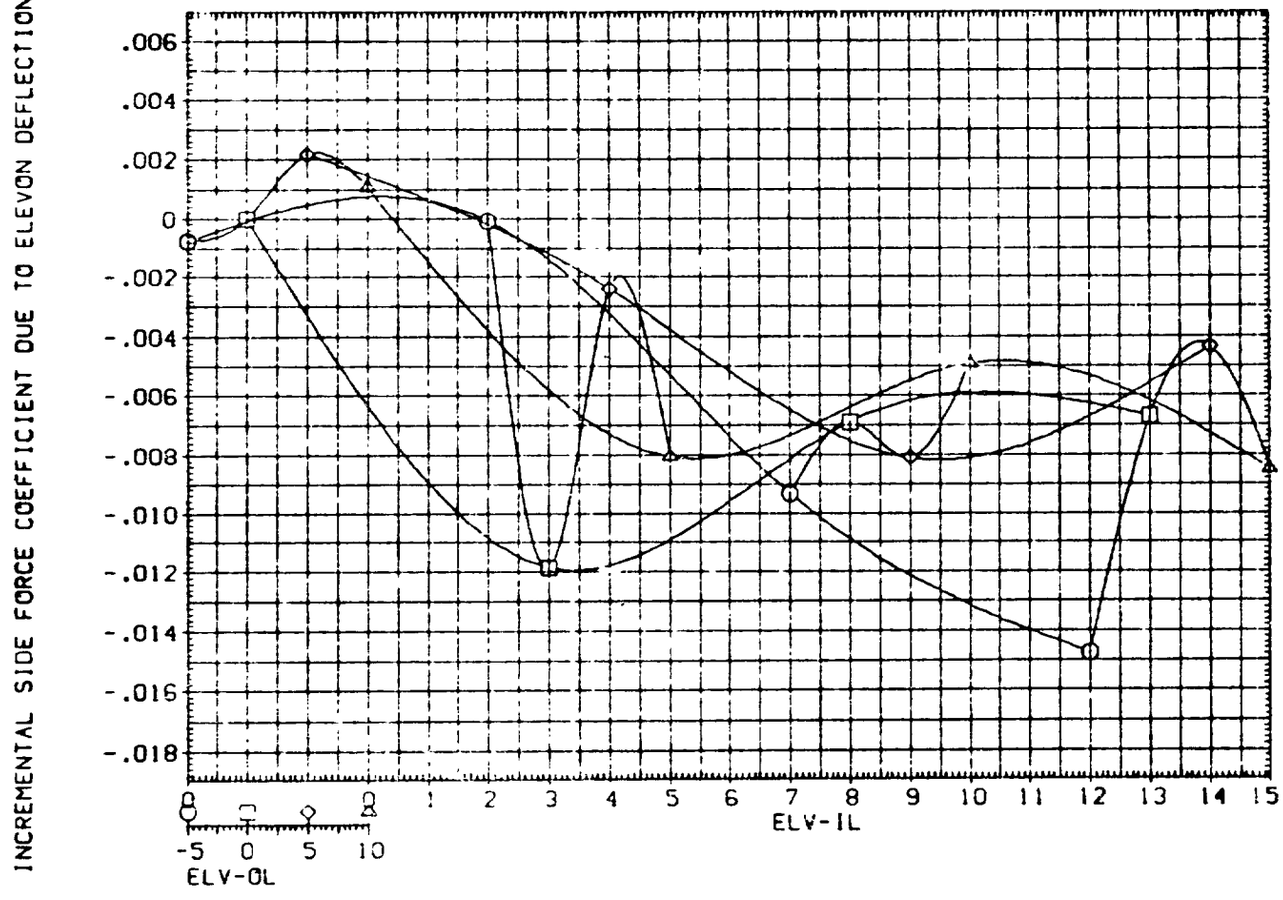
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 8.0 (BINCSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.900	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2630.0000	SQ FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN XT
YMRP	.0000	IN YT
ZMRP	400.0000	IN ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

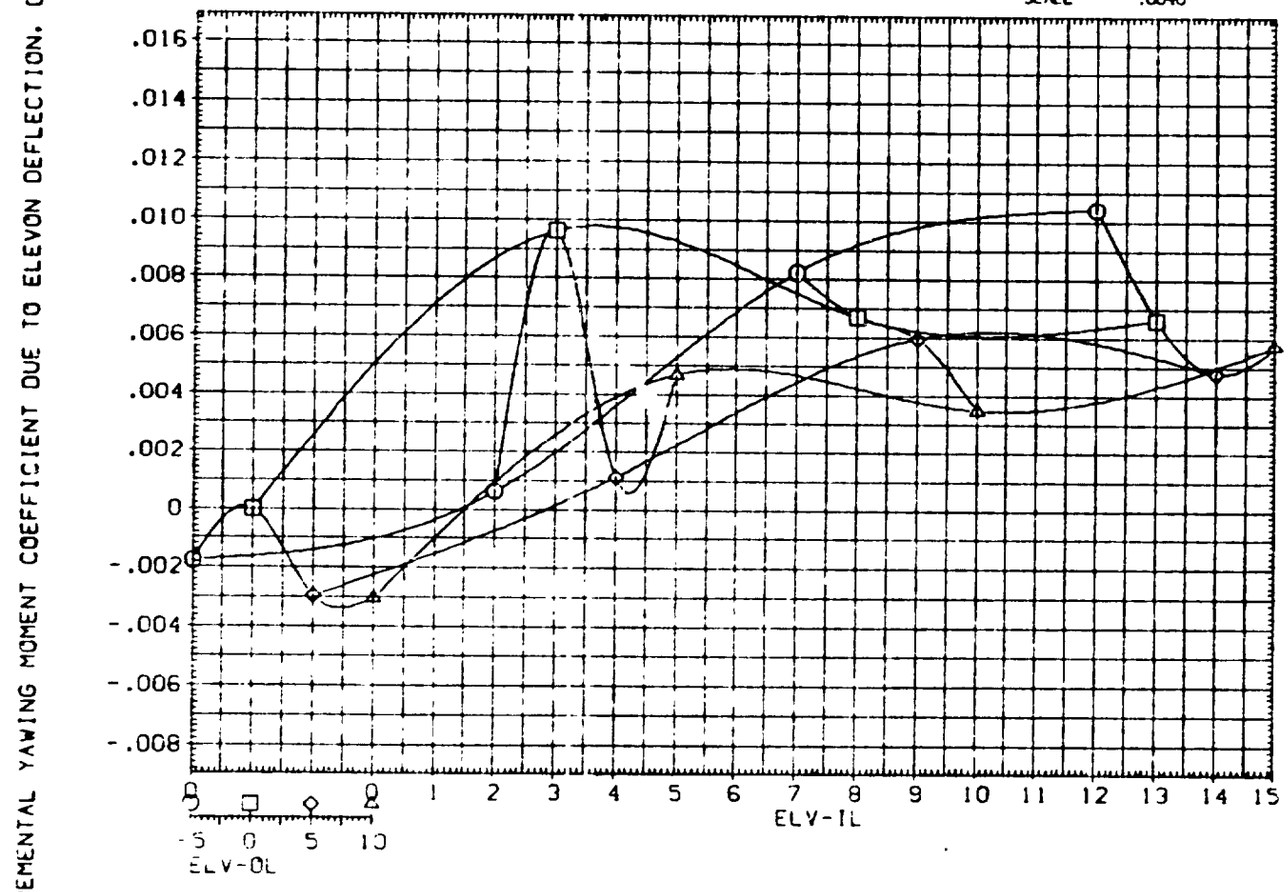
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 8.0 (BINCSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

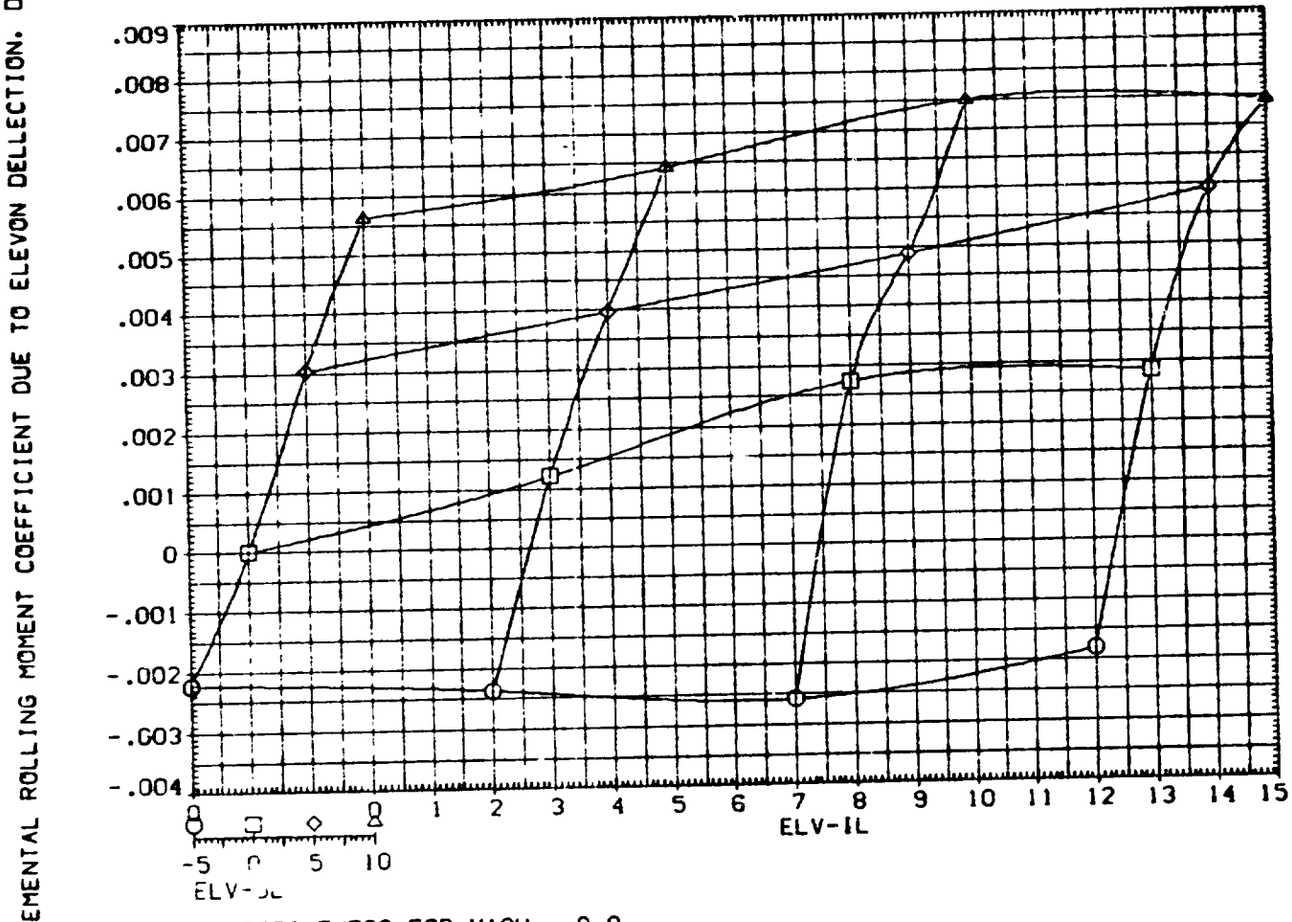
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 8.0 (BINCSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	.900	ELV-IR	.000
ELV OR	000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

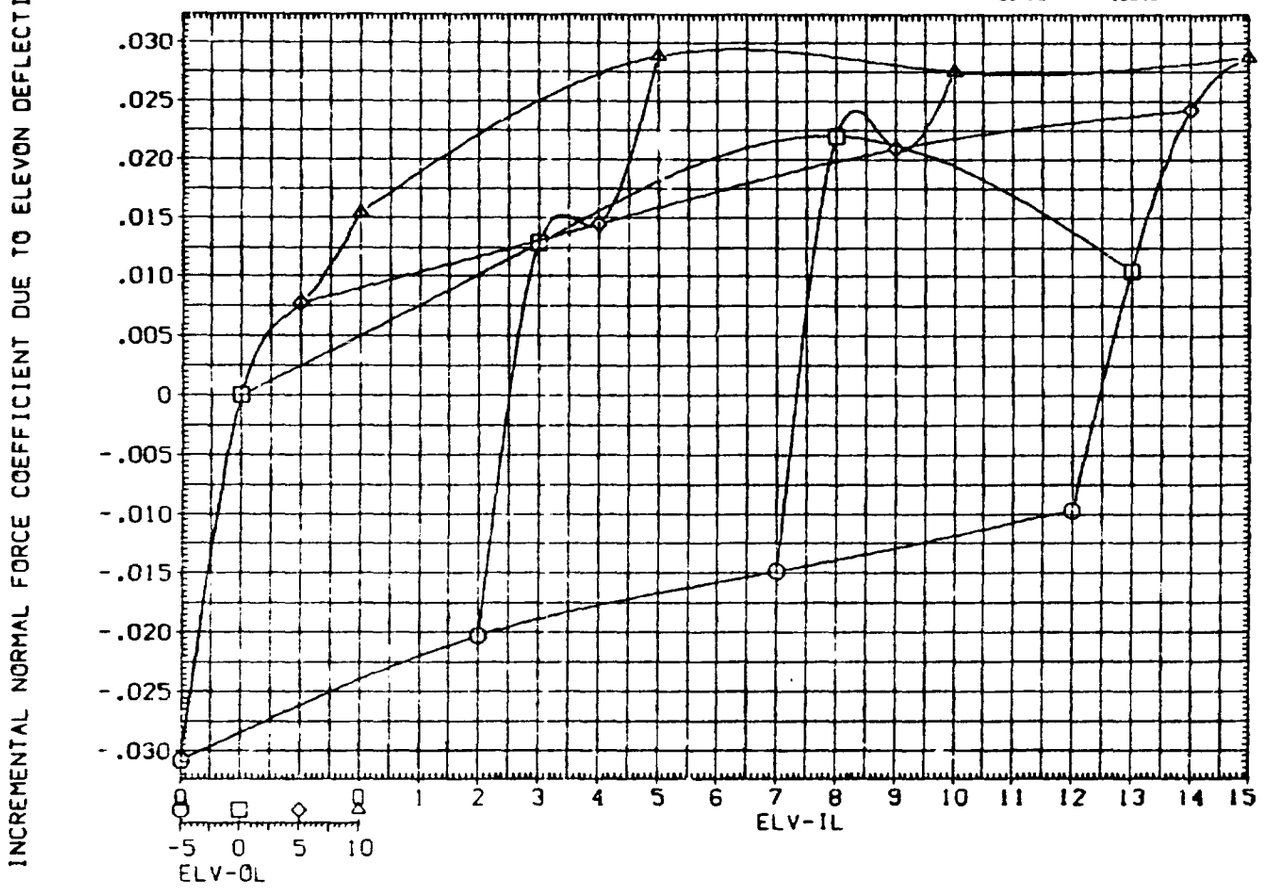
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 10.0(BINCSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

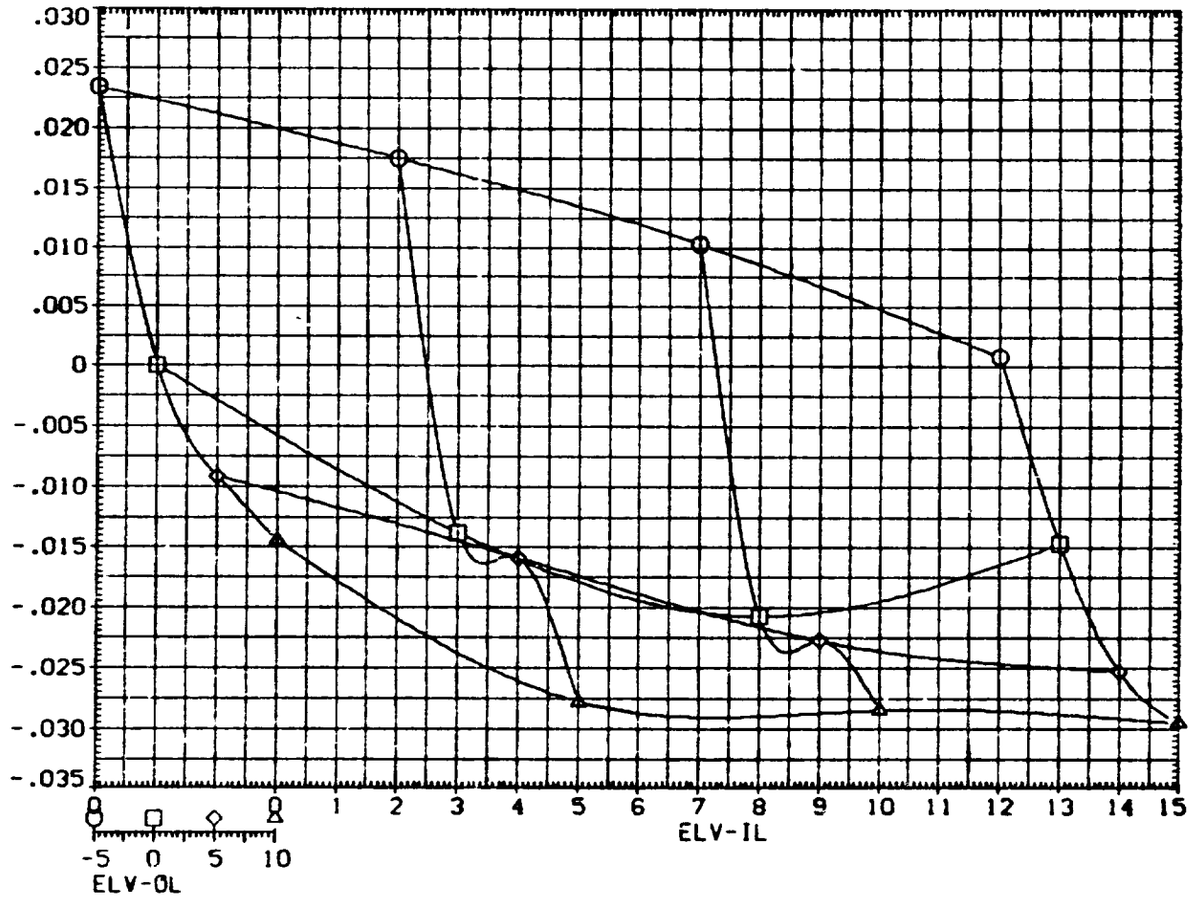
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 10.0(BINCSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

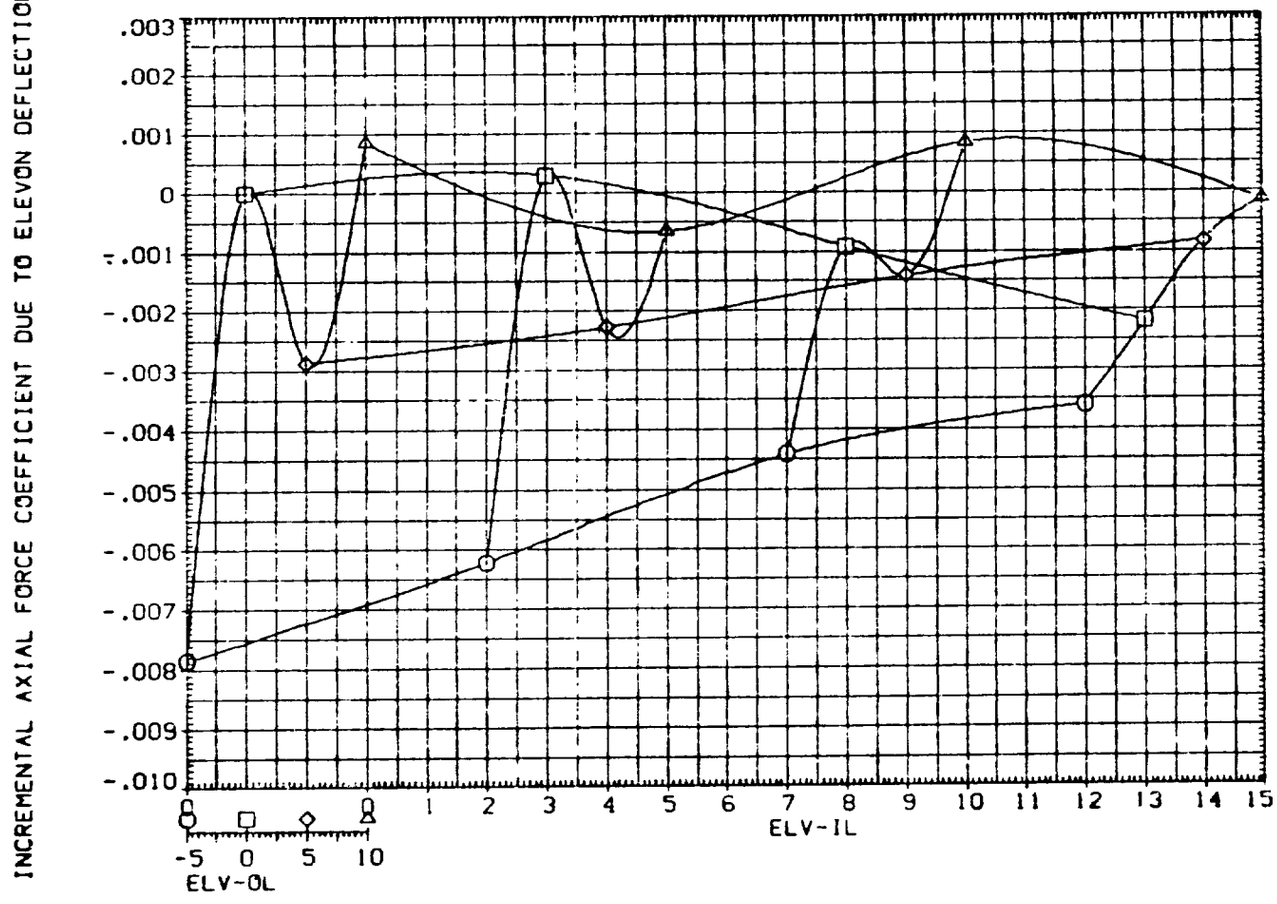
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 10.0(BINCSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

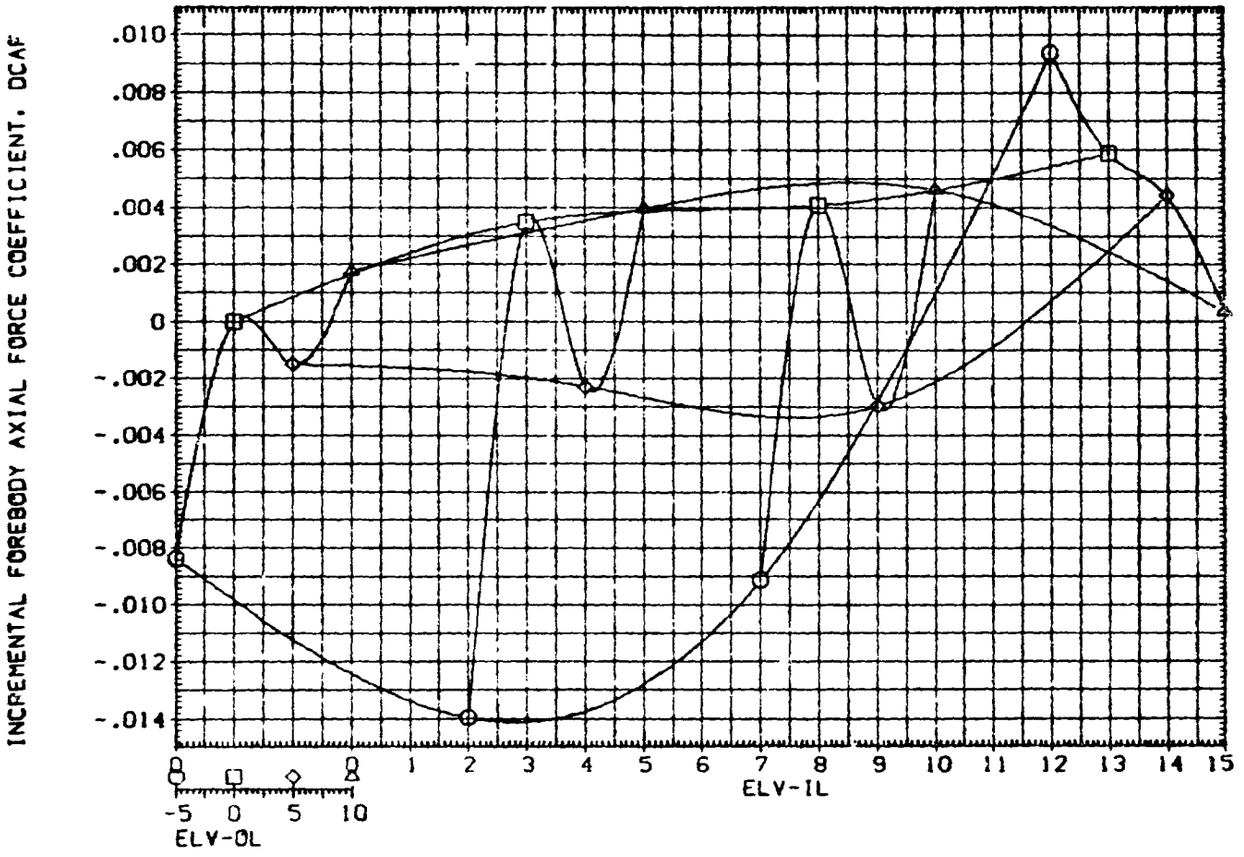
MSFC TWT 622 (IA125) 74 OTS, M= 0.9, ALPHA= 10.0(BINCSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

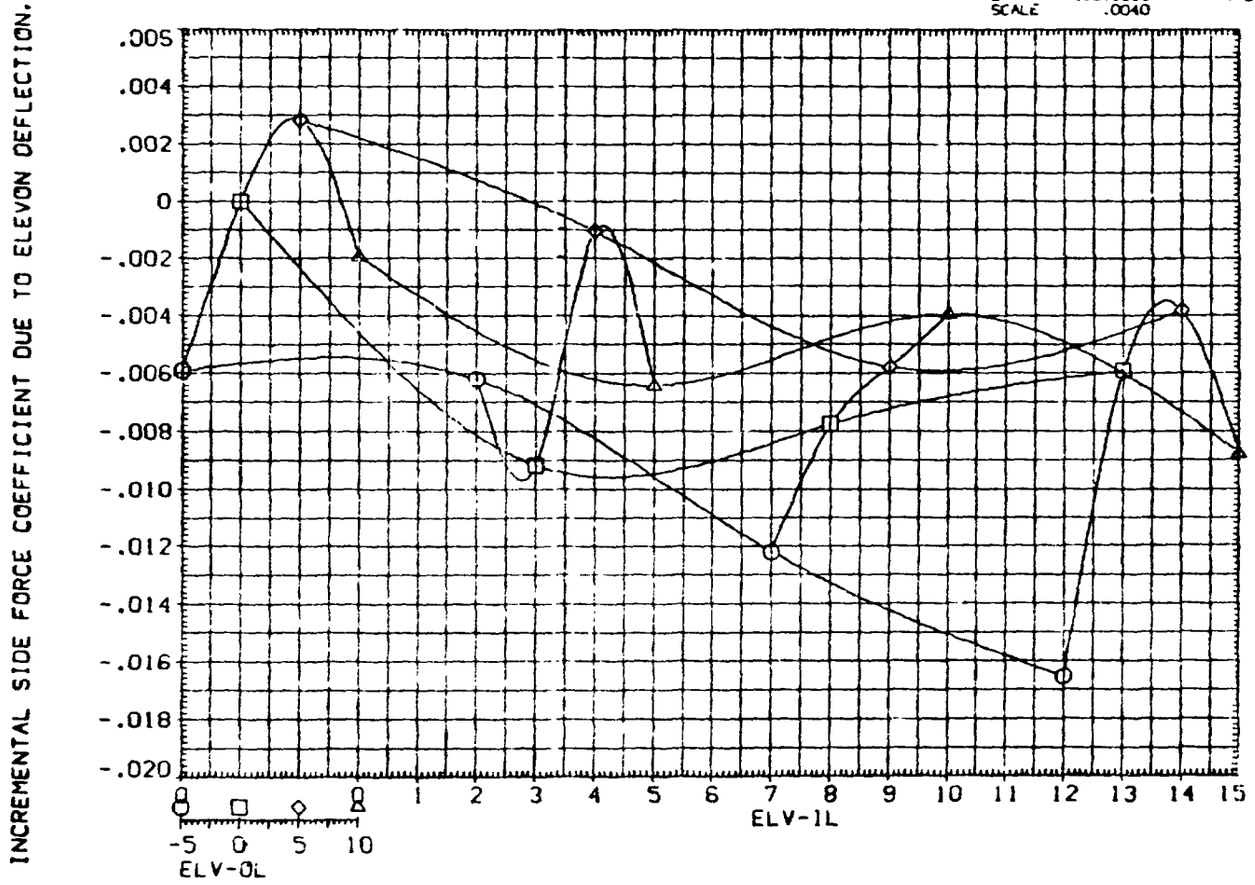
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 10.0(BINCSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.900	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

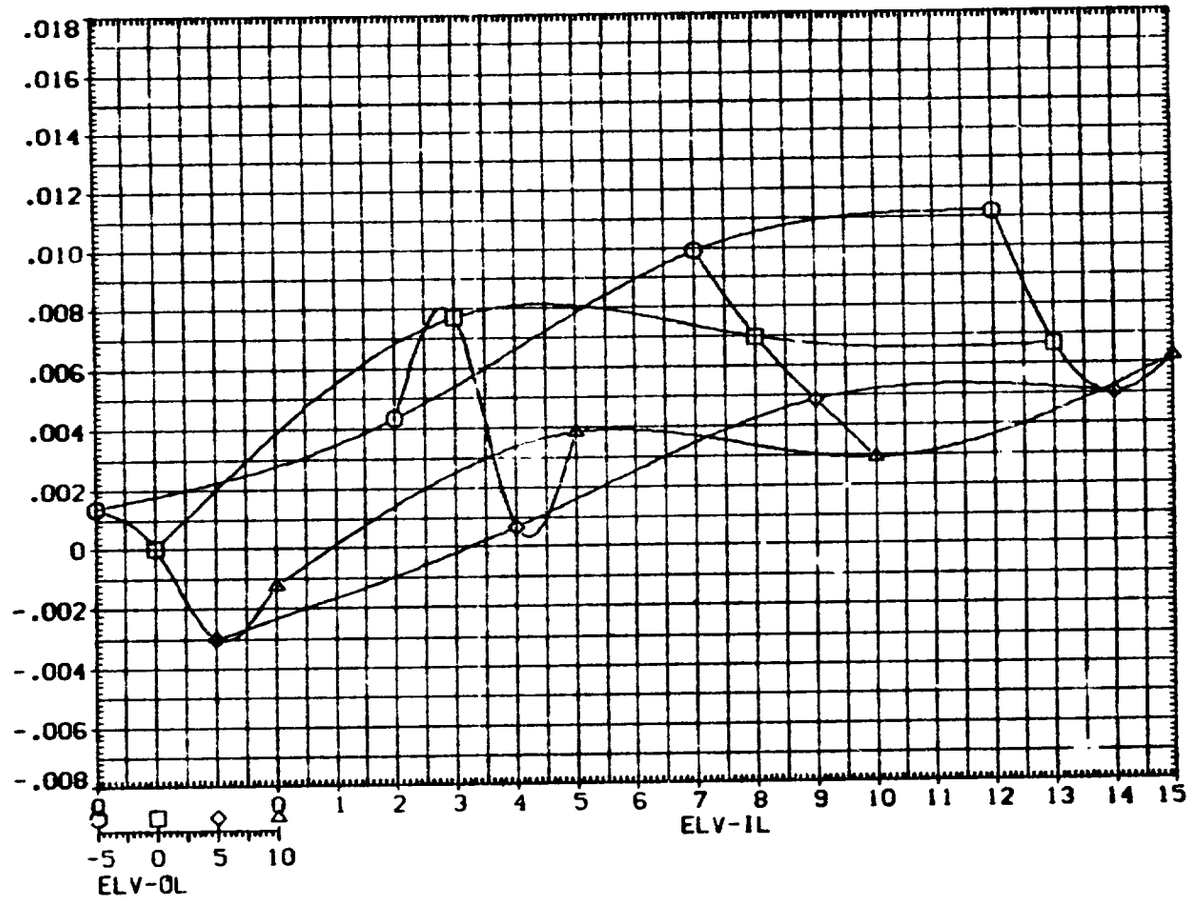
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 10.0(BINCSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 0.9

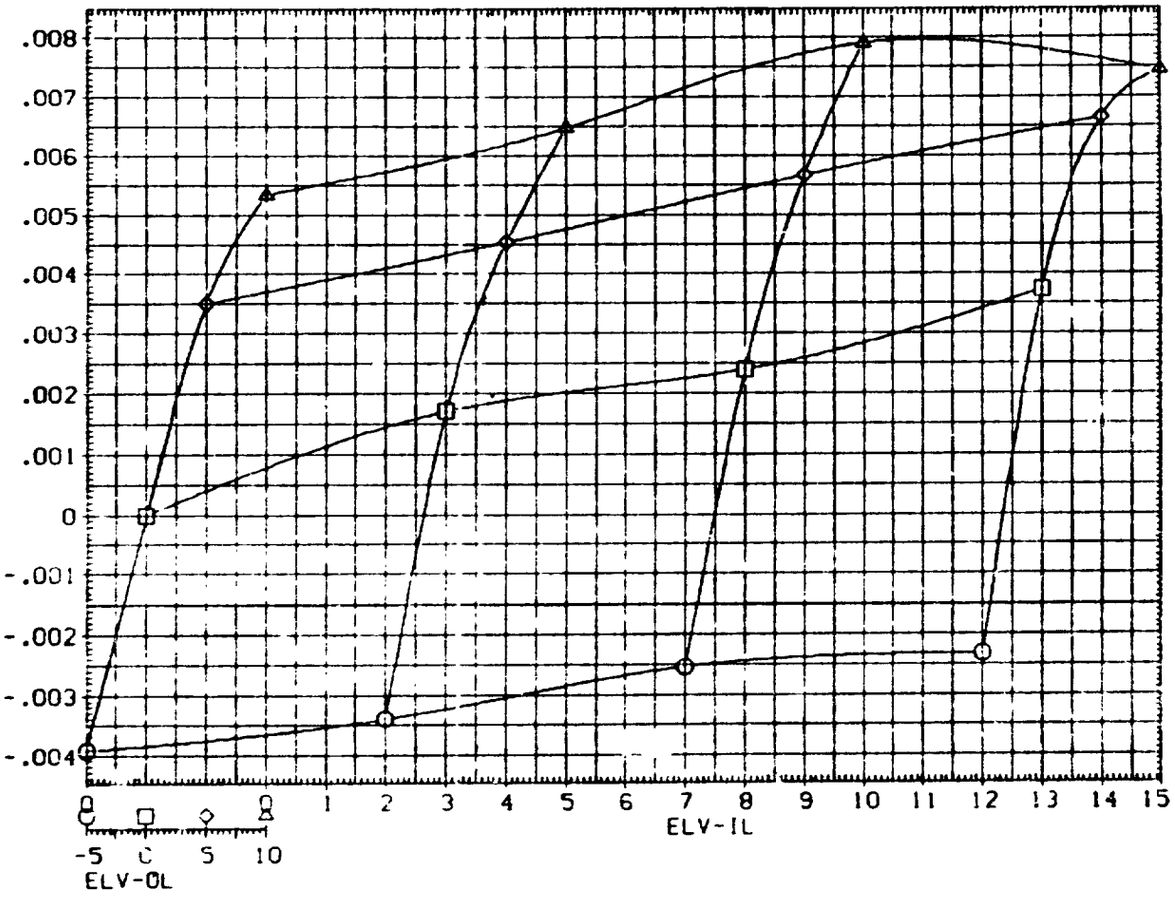
MSFC TWT 622 (IA125) 74 OTS. M= 0.9. ALPHA= 10.0(BINCSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	.900	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0000	



ELEVON EFFECTIVENESS FOR MACH = 0.9

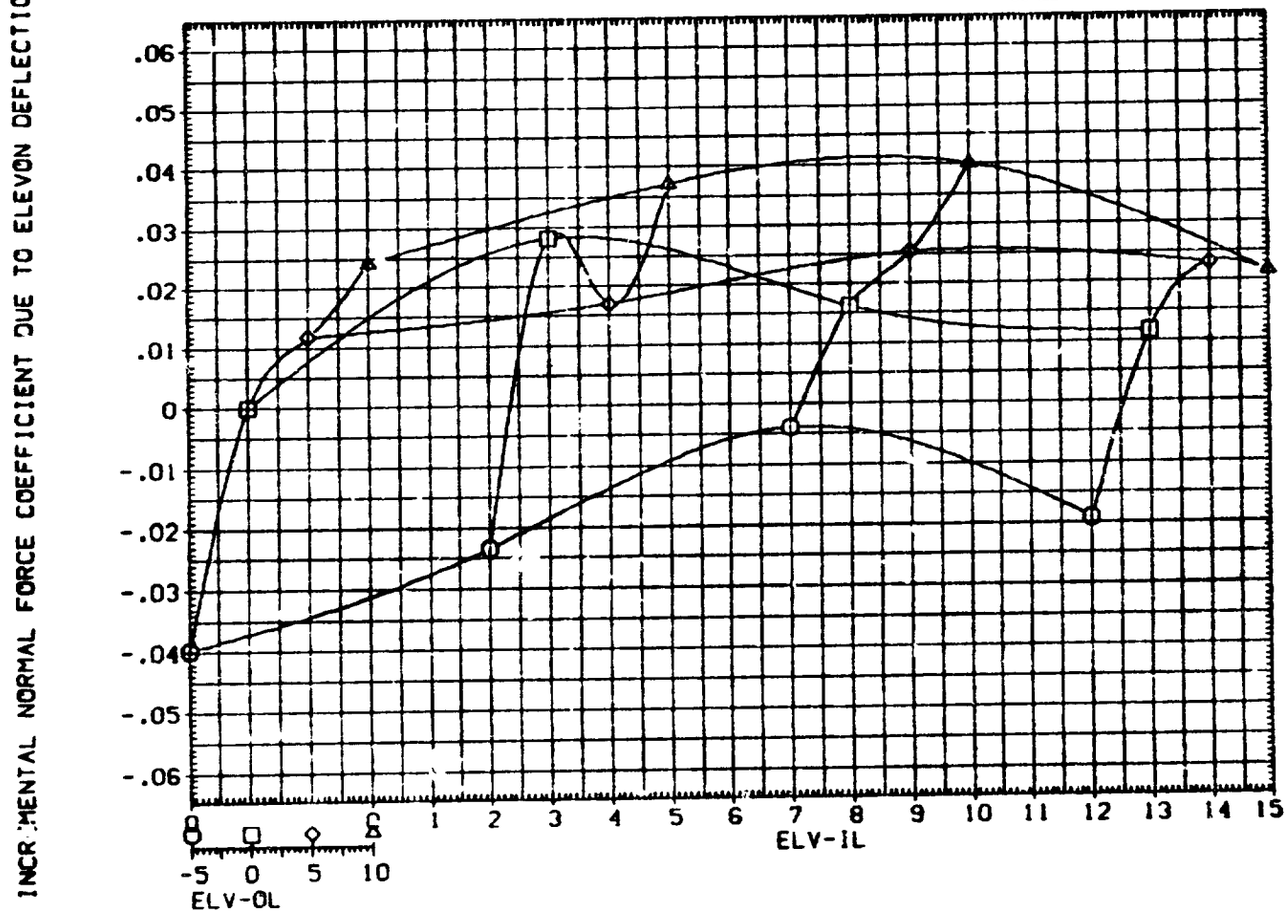
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA=-10.0(BINDSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.050	ELV-IR	.000
ELV-OF	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

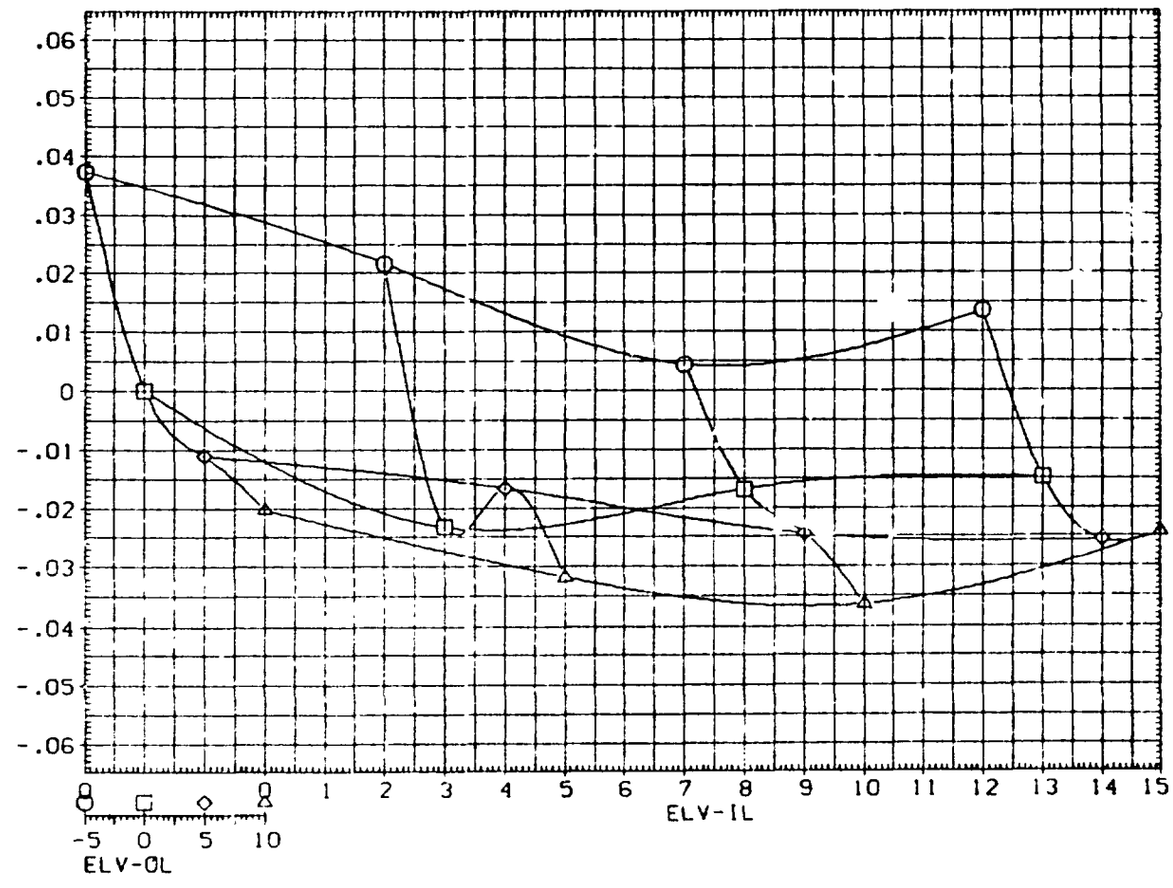
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA=-10.0(BINDSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1230.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

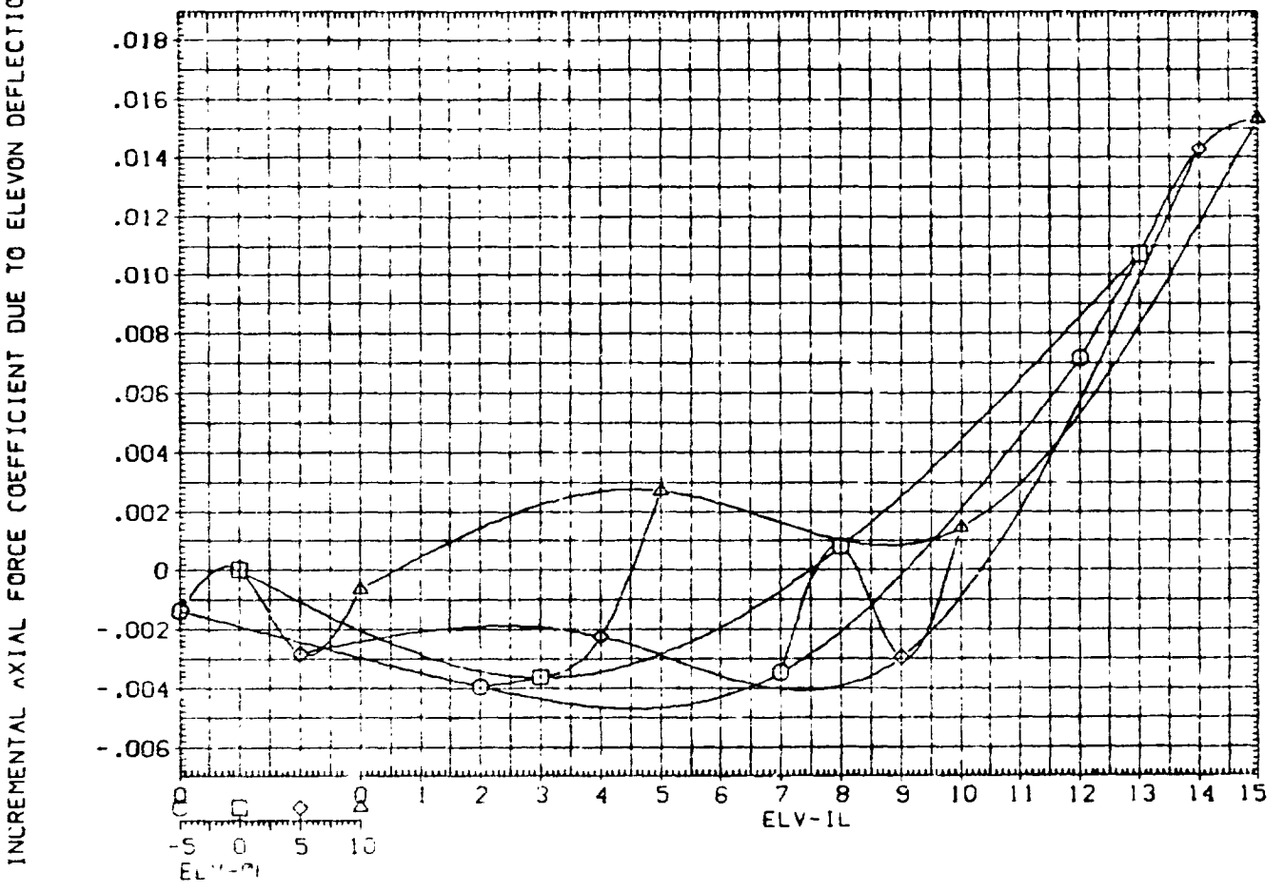
MSFC [illegible] 62[illegible] [illegible] 25[illegible] 74 0[illegible]3. M=1.05. ALPHA=-10.0(BINDSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

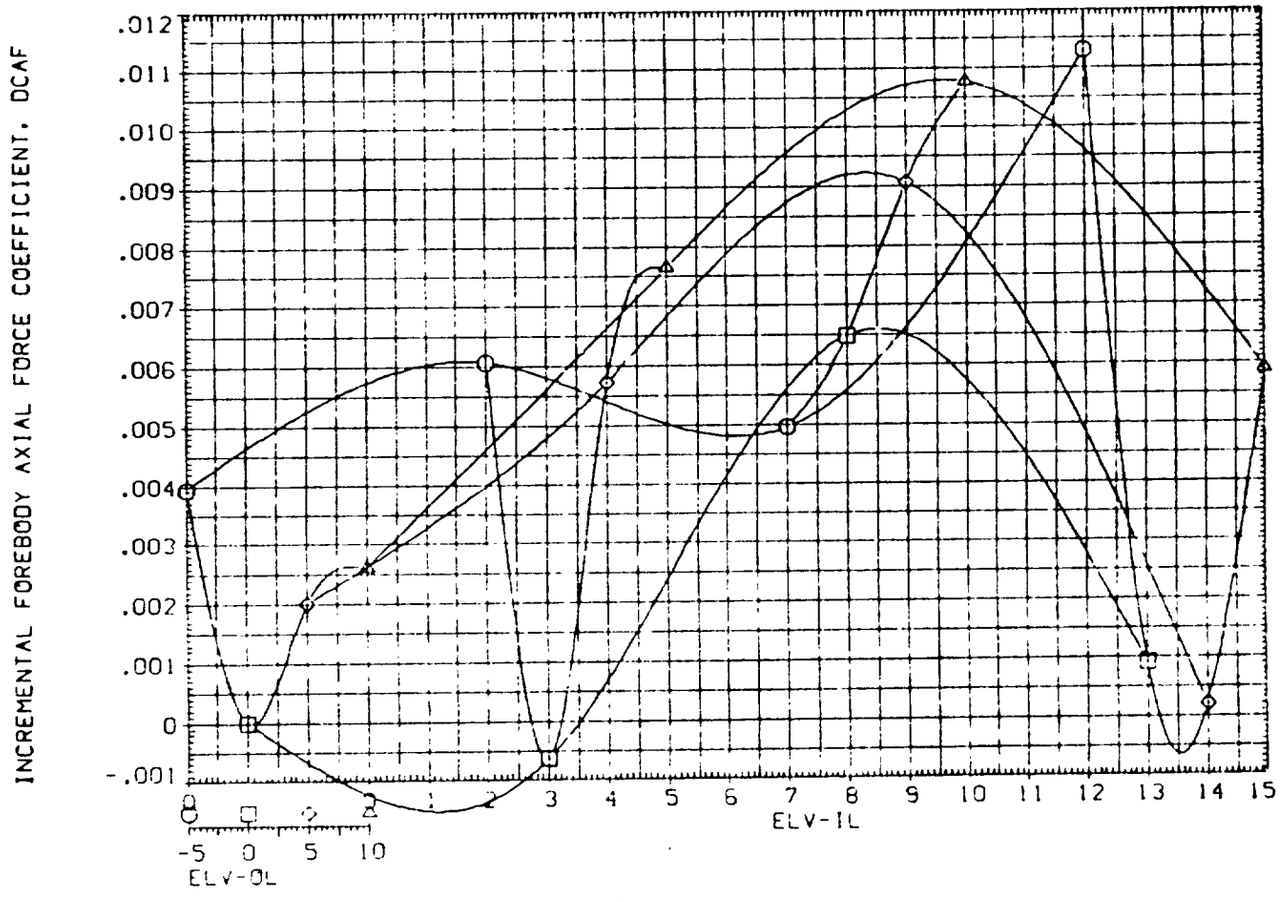
MSFC TWT 622 (1A125) 74 OTS, M=1.05, ALPHA=-10.0(BINDSA)

PARAMETRIC VALUES

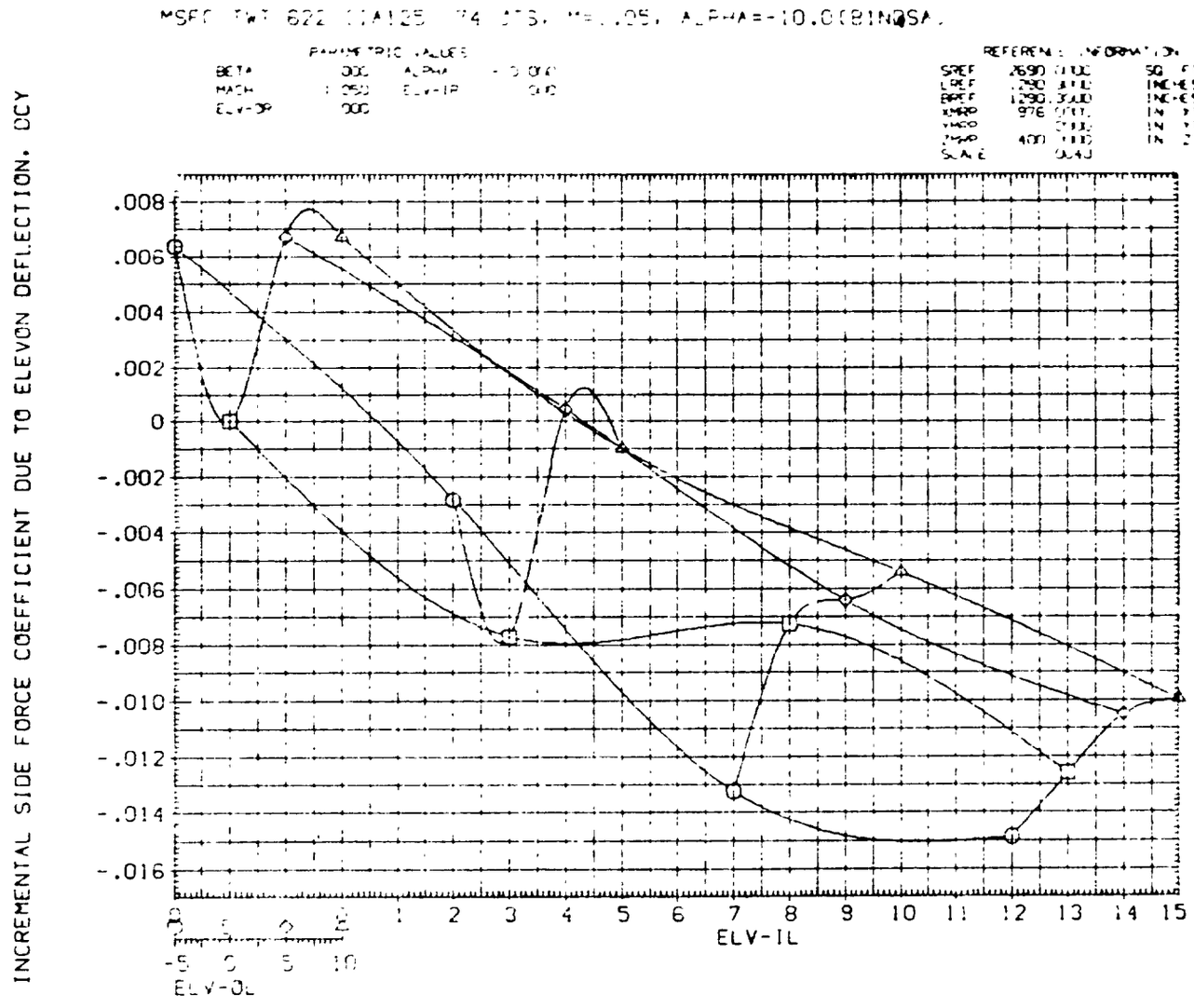
BETA	.000	ALPHA	-10.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	290.3000	INCHES
XMRP	976.0000	IN XT
YMRP	.0000	IN YT
ZMRP	400.0000	IN ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05



ELEVON EFFECTIVENESS FOR MACH = 1.05

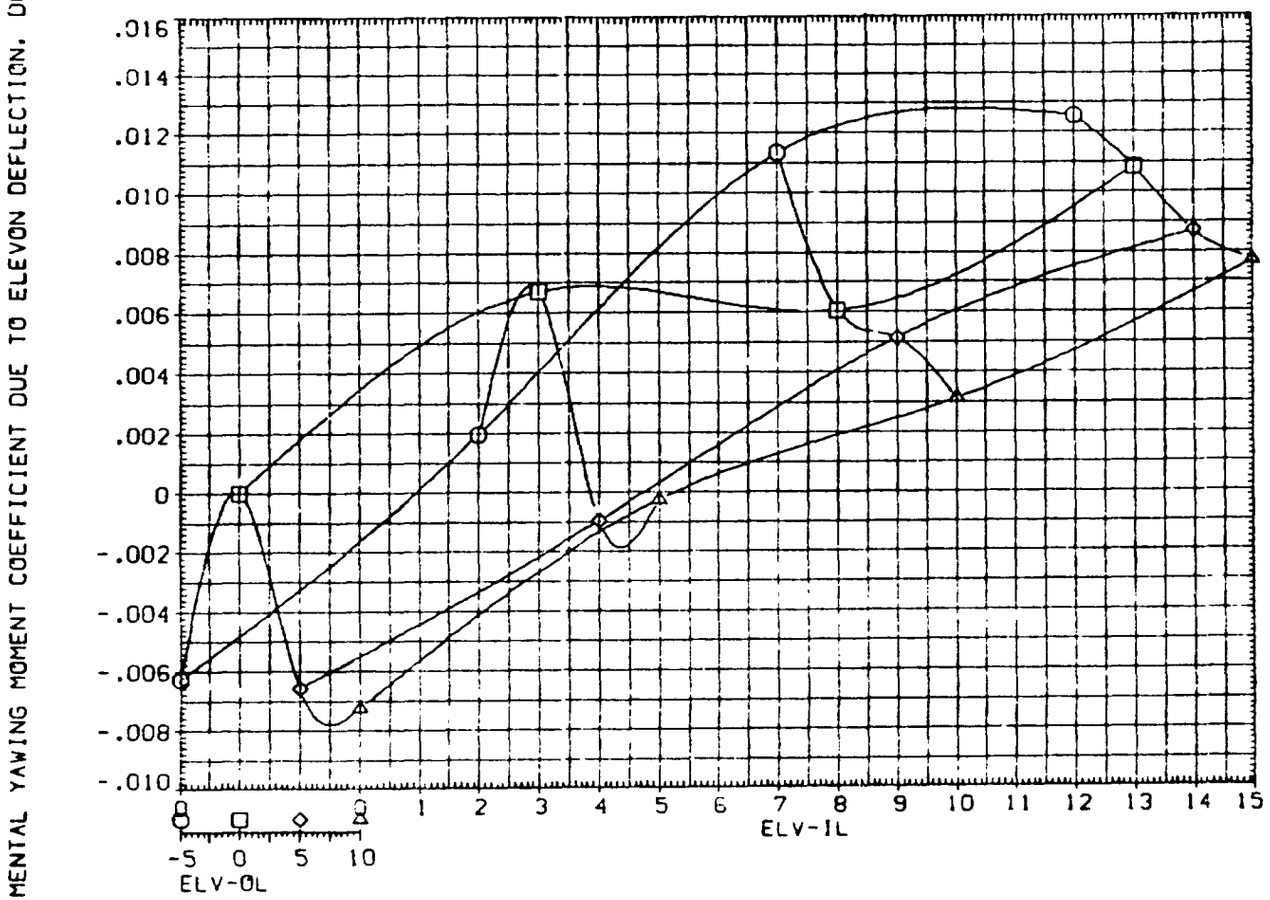
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA=-10.0(BINDSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

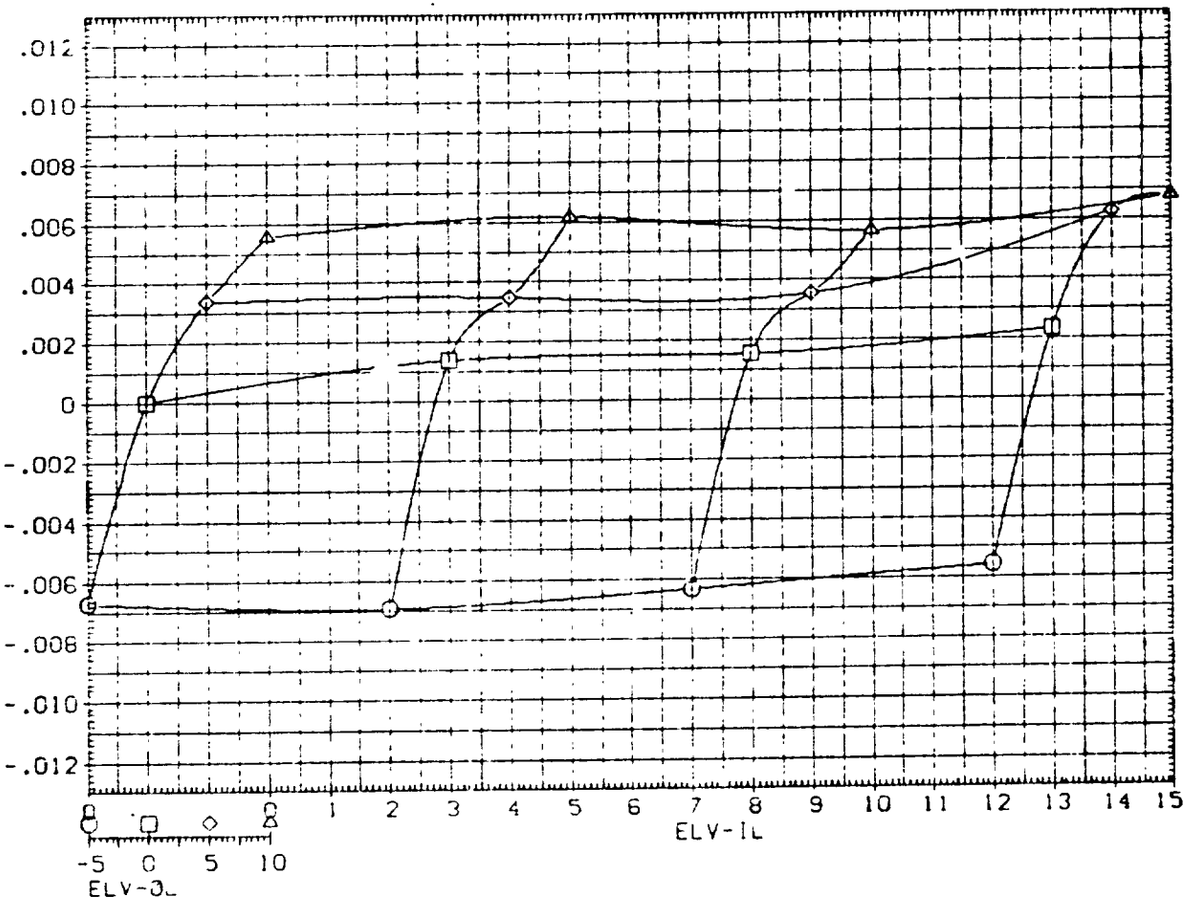
MSFC TWT 622 (:A:25) 74 OTS. M=1.05. ALPHA=-10.0(BINDSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

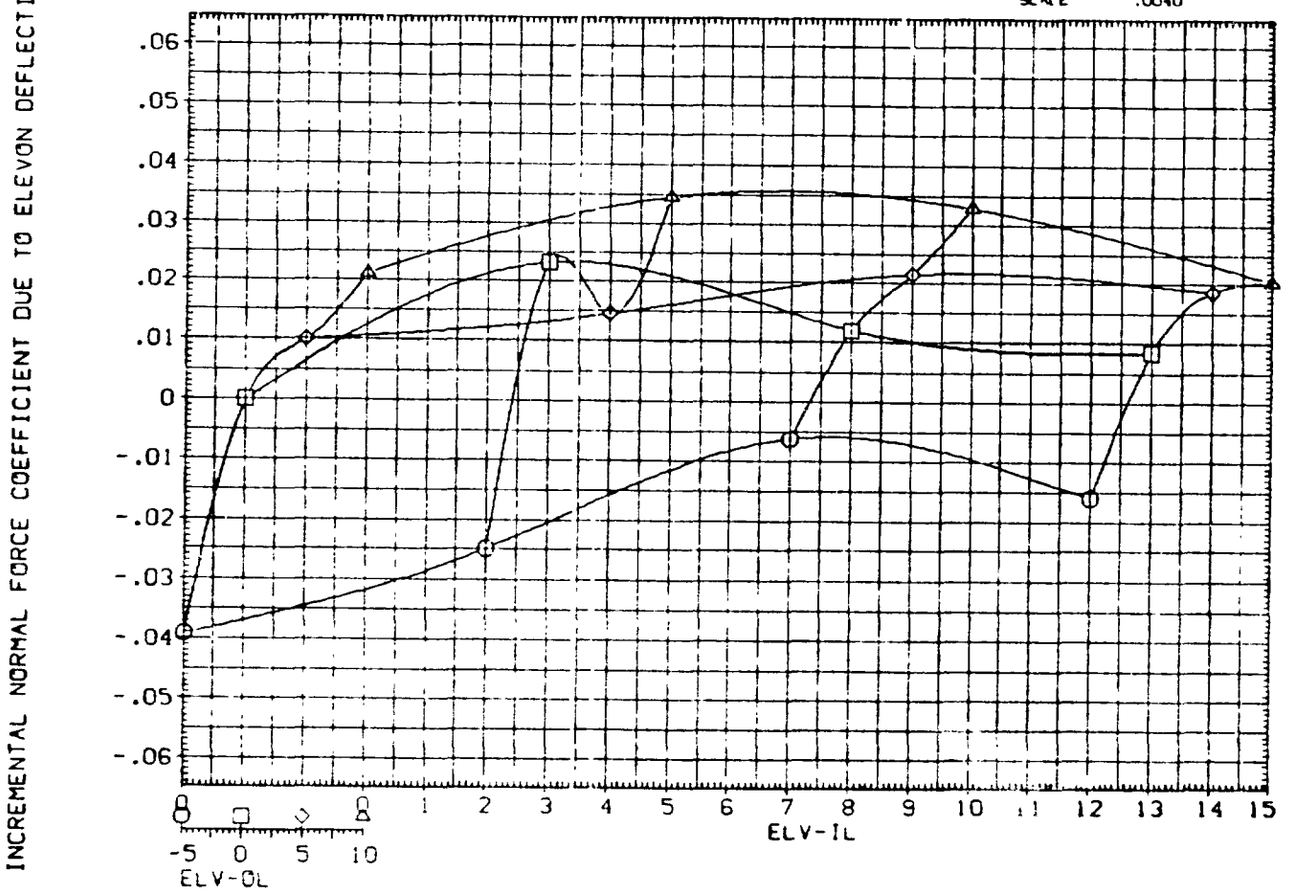
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA=-8.0 (BINDSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.(OI)
MACH	1.050	ELV-IR	.(OI)
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

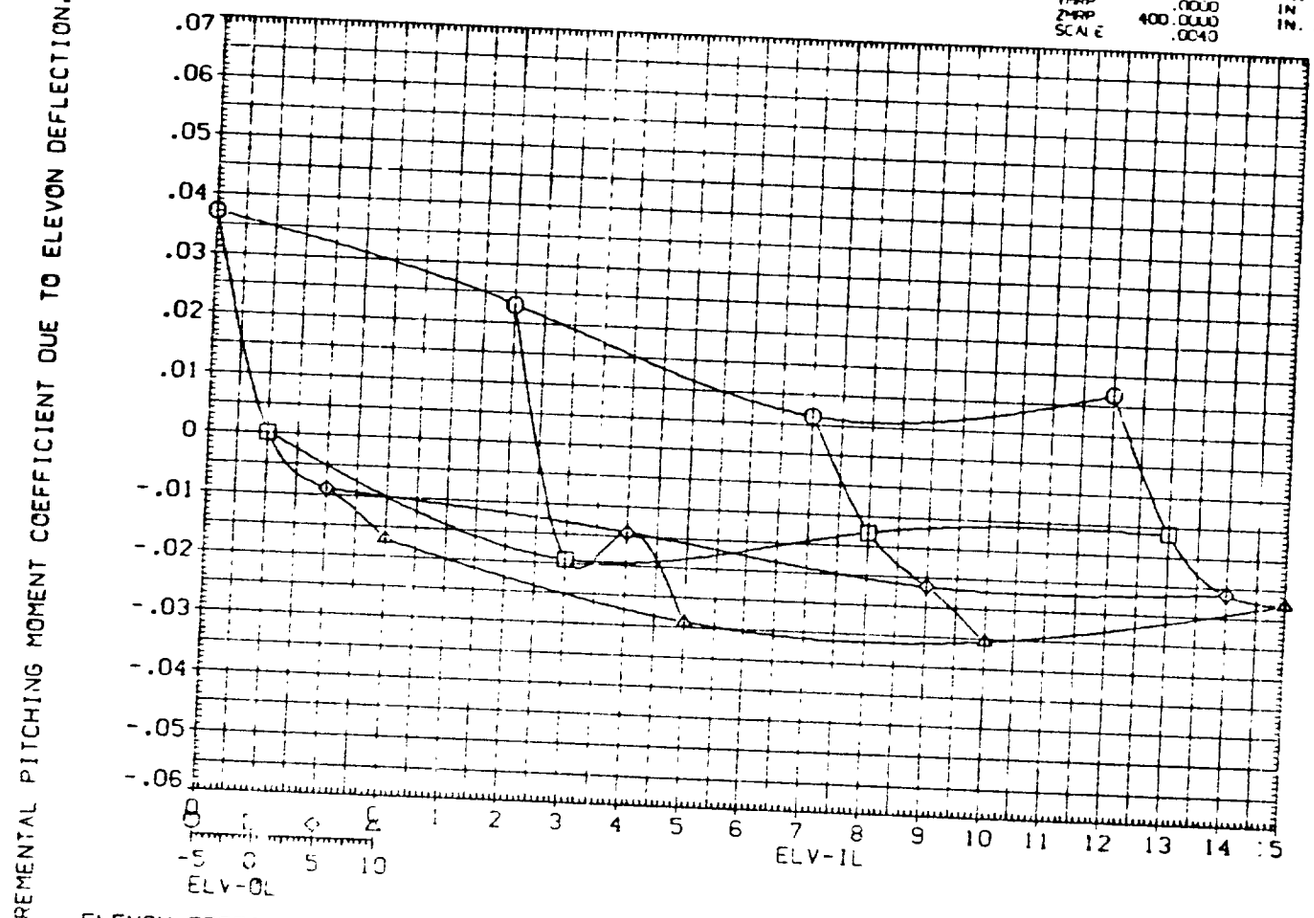
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA=-8.0 (BINDSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.100
MACH	1.050	ELV-IR	.100
ELV-OR	.000		

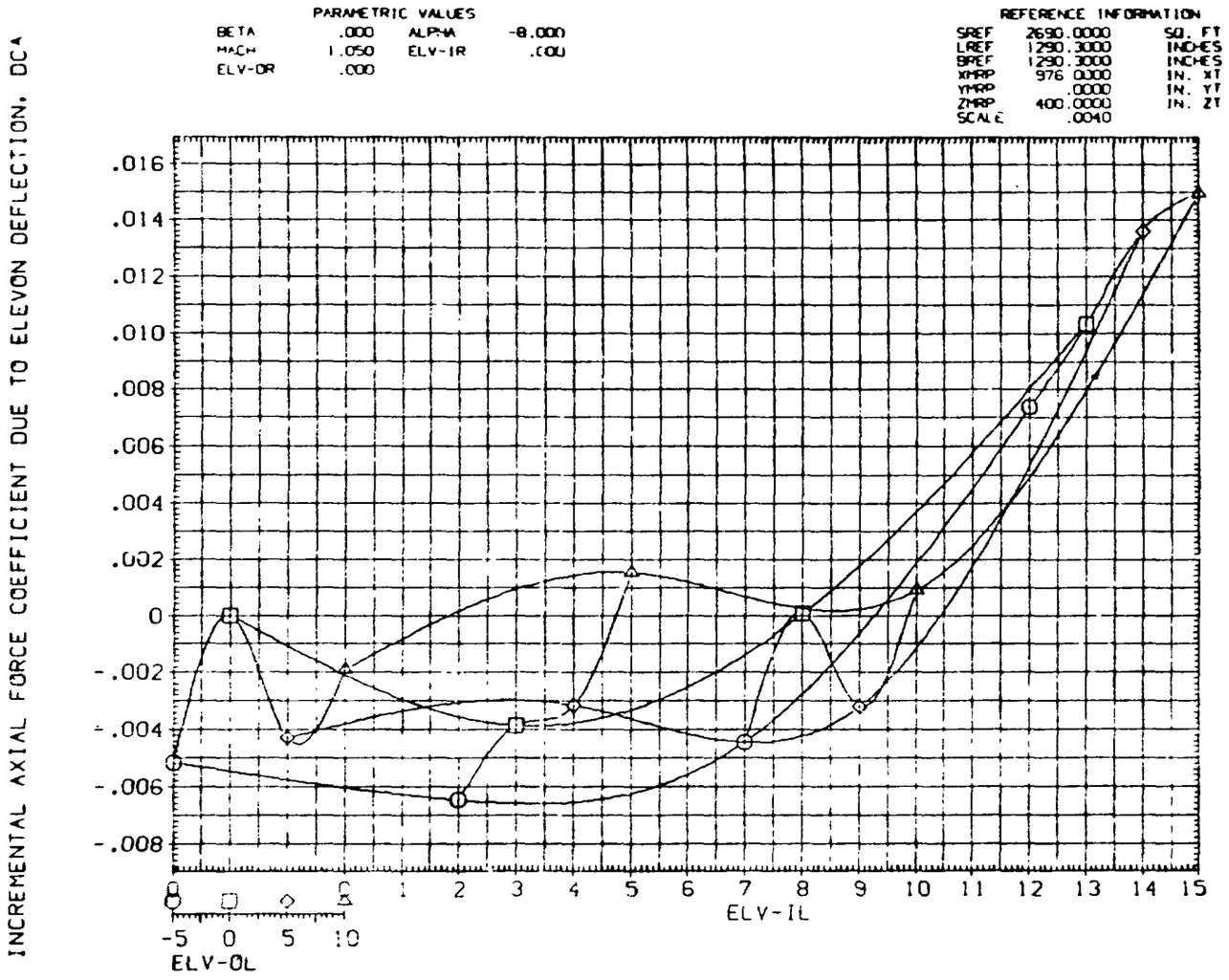
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA=-8.0 (BINDSB)



ELEVON EFFECTIVENESS FOR MACH = 1.05

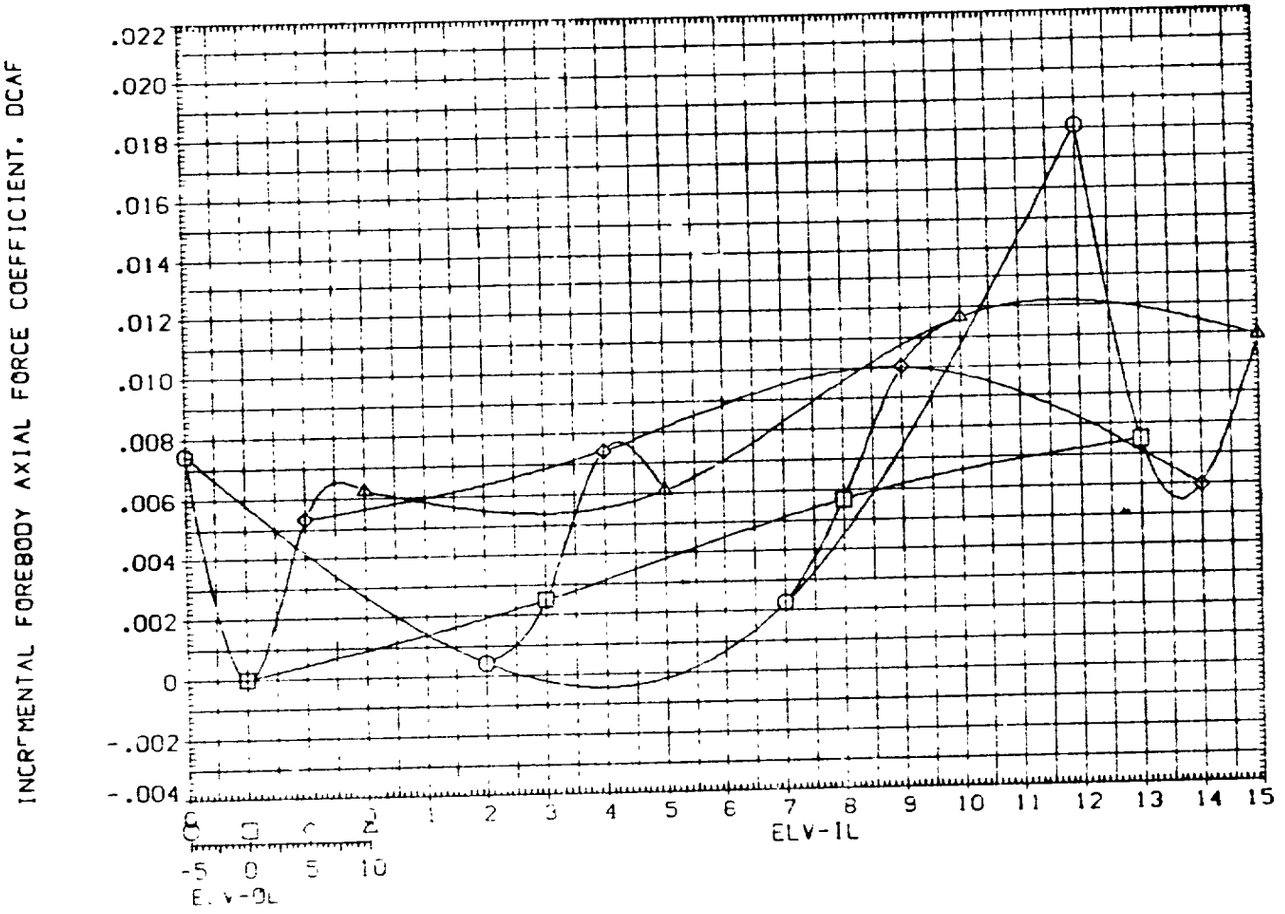
MSFC TWT 622 (A:25) 74 OTS. M=1.05. ALPHA=-8.0 (BINDSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

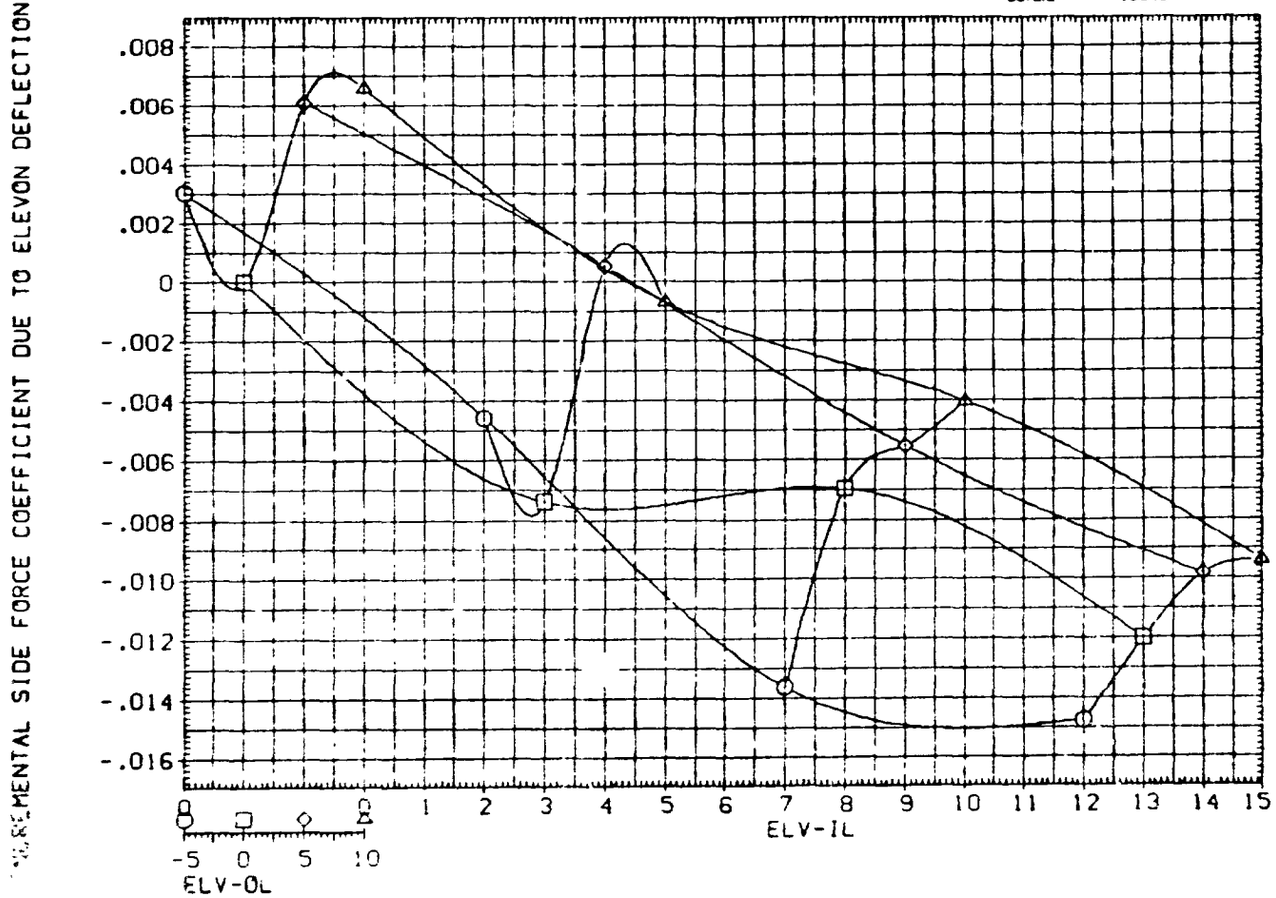
MSFC TWT 622 (!A!25) 74 OTS, M=1.05, ALPHA=-8.0 (BINDSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

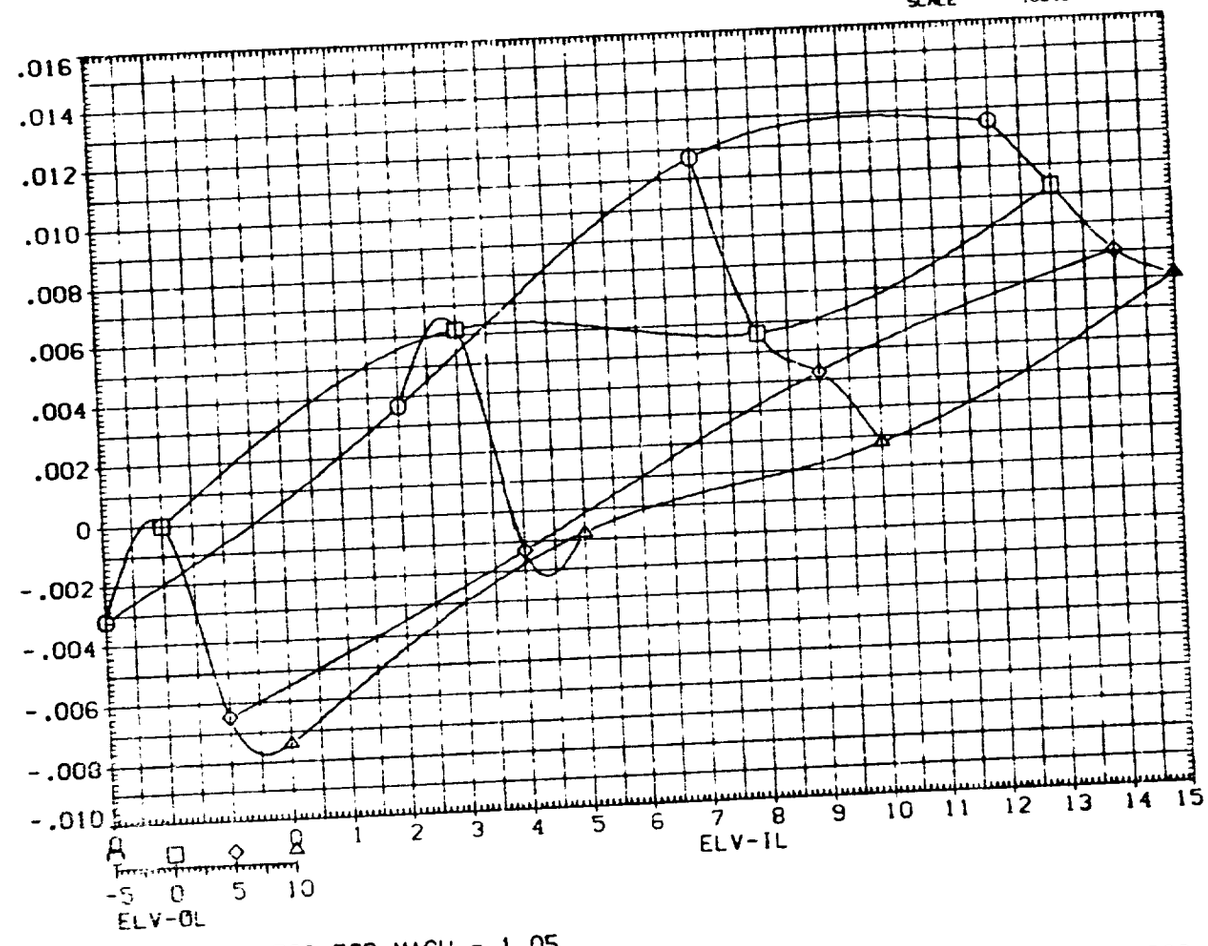
MSFC TW 622 (IA125) 74 OTS. M=1.05. ALPHA=-8.0 (BINDSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

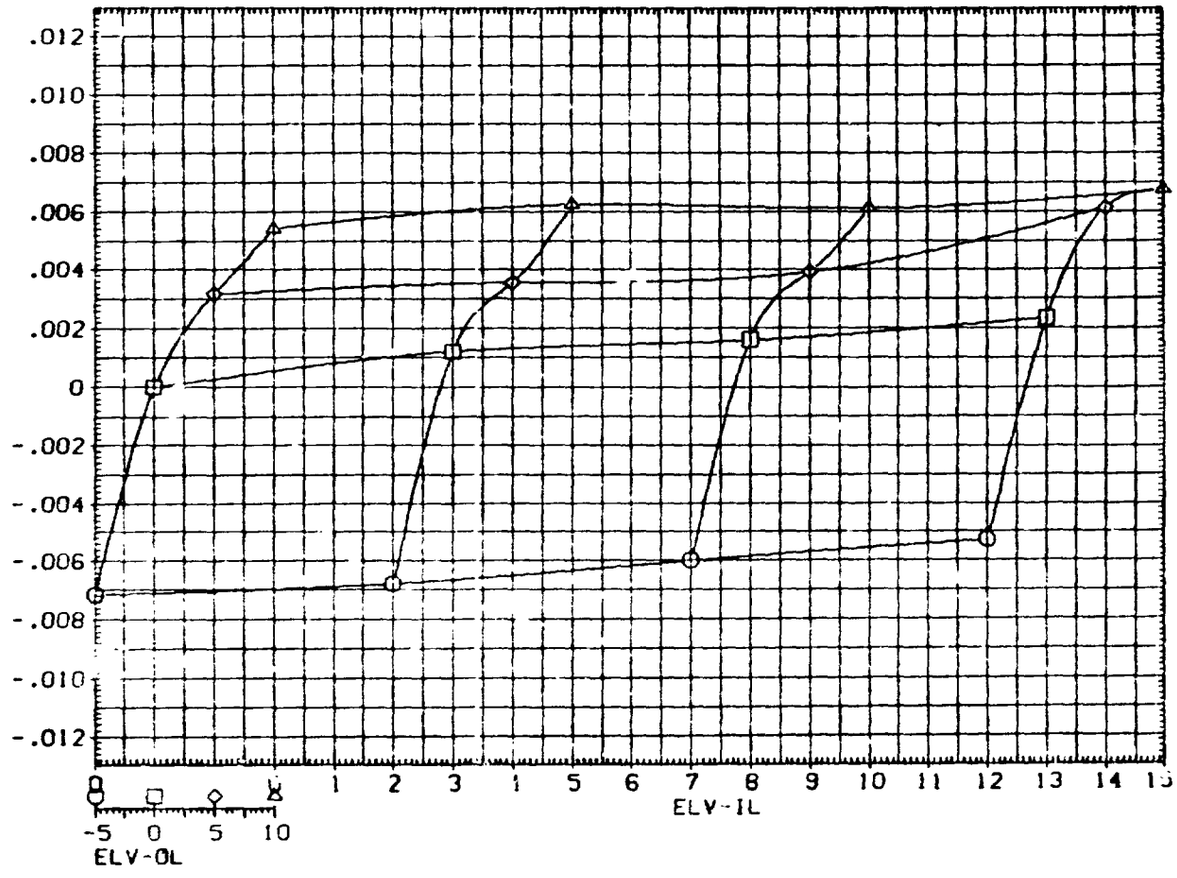
MSFC TWT 622 (IA125) 74 OTS. M=1.05, ALPHA=-8.0 (BINDSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1230.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

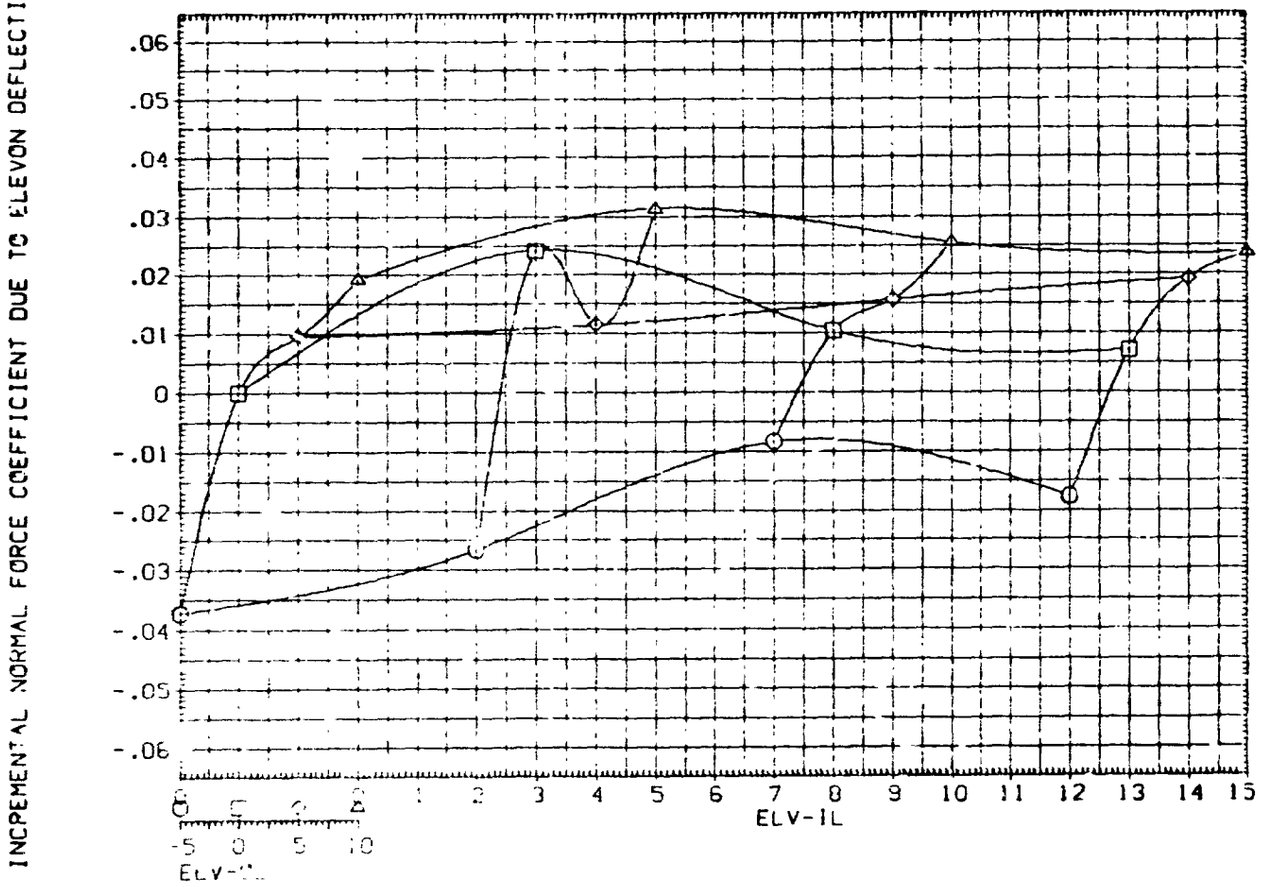
MSFC TWT 622 (IA125) 74 PTS. M=1.05, ALPHA=-6.0 (BINDSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.050	ELV-IR	0.0
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0000	



ELEVON EFFECTIVENESS FOR MACH = 1.05

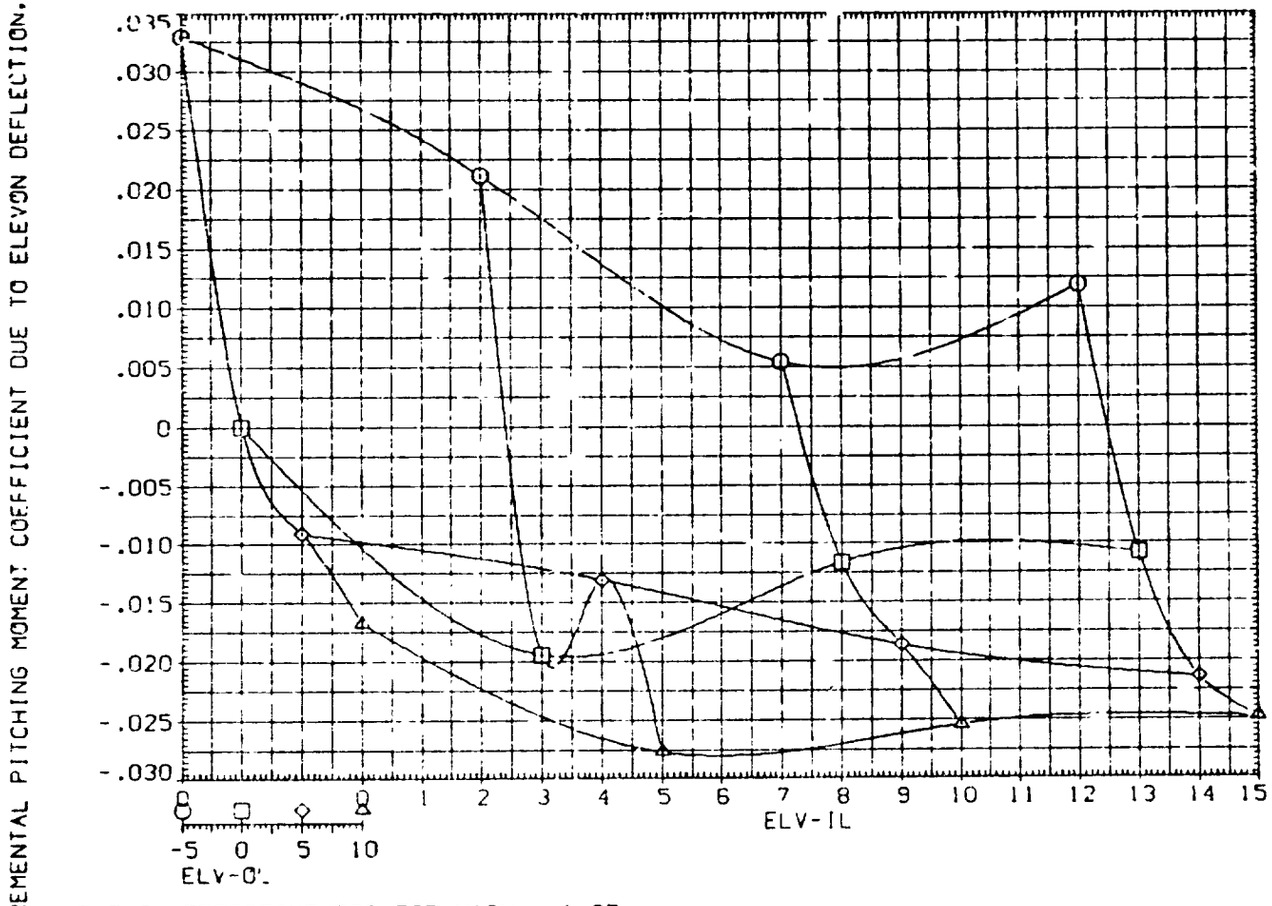
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA=-6.0 (BINDSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

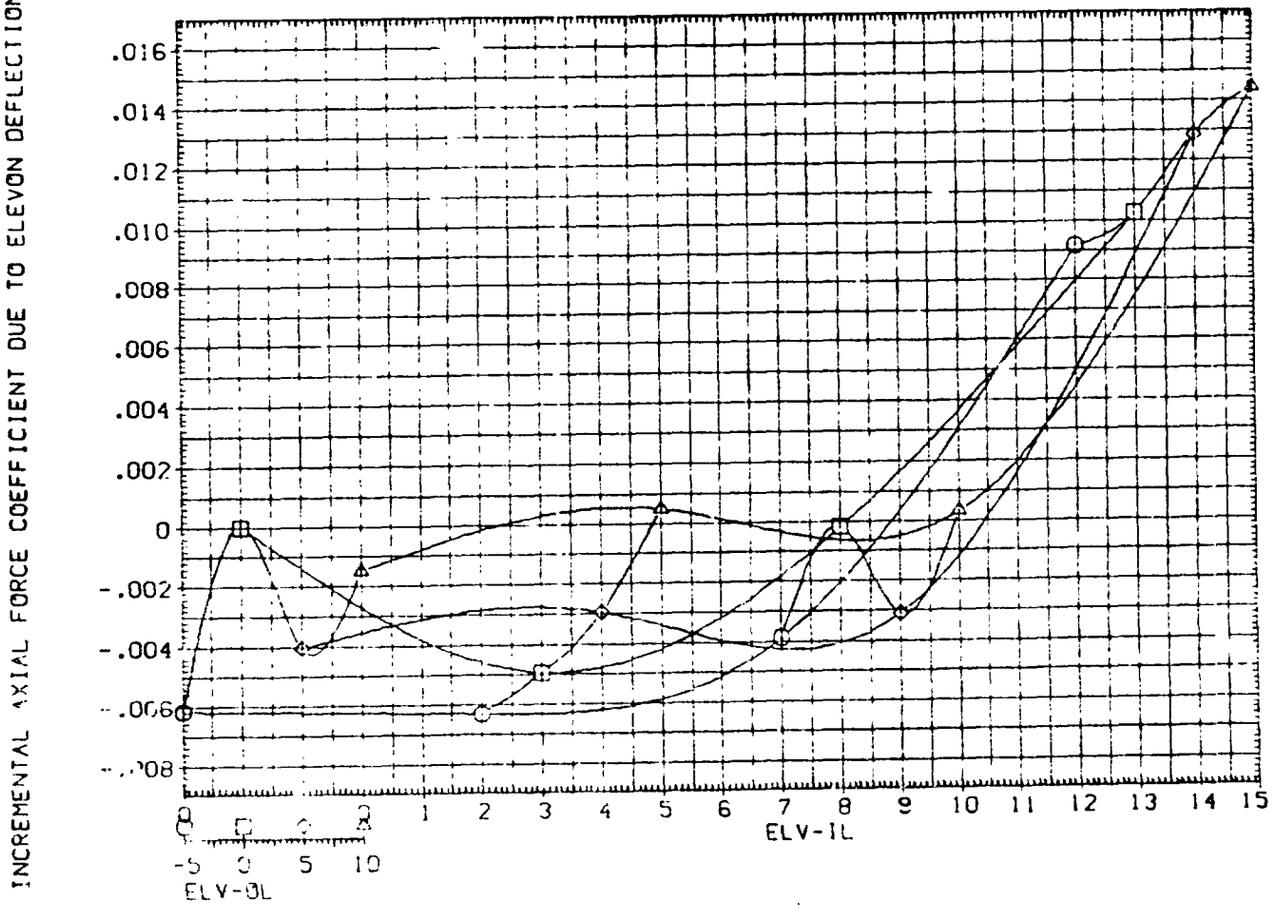
MSFC T[illegible] [illegible] (IA125, 74 OTS, M=1.05, ALPHA=-6.0 (BINDSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.000	SQ. FT
LREF	1290.000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

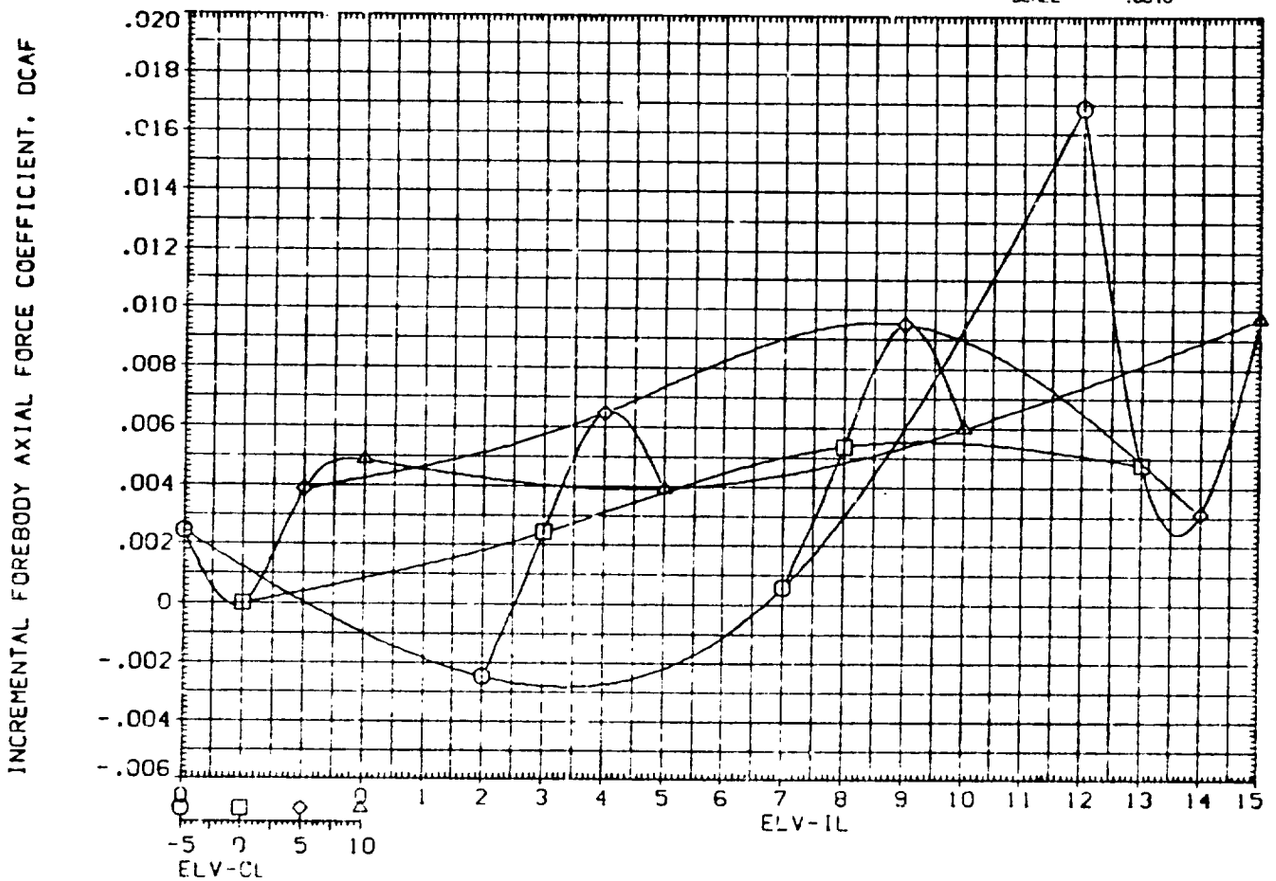
MSFC TWT 622 (!A!25) 74 OTS, M=1.05, ALPHA=-6.0 (BINDSC)

PARAMETRIC VALUES

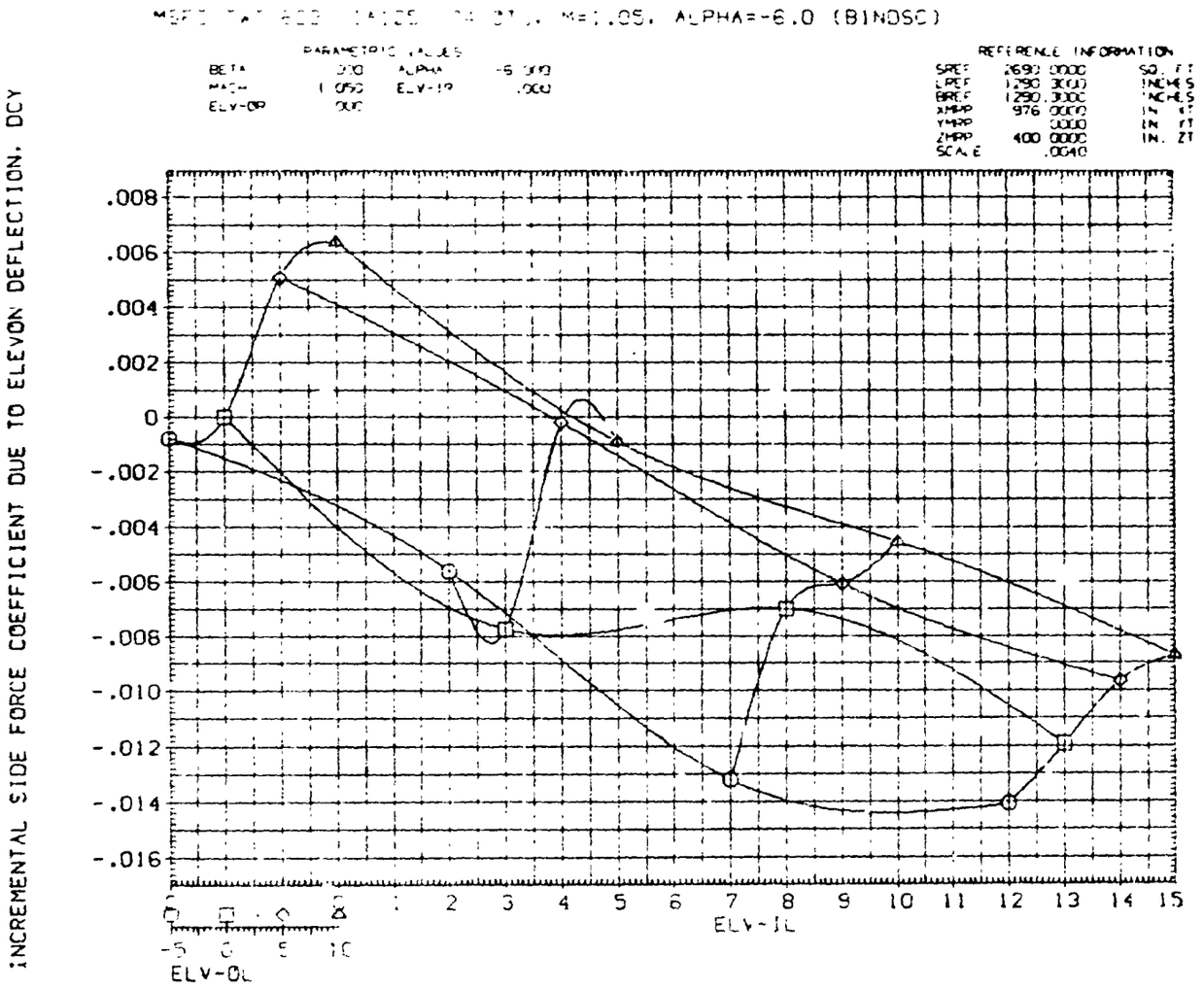
BETA	.000	ALPHA	-6.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05



ELEVON EFFECTIVENESS FOR MACH = 1.05

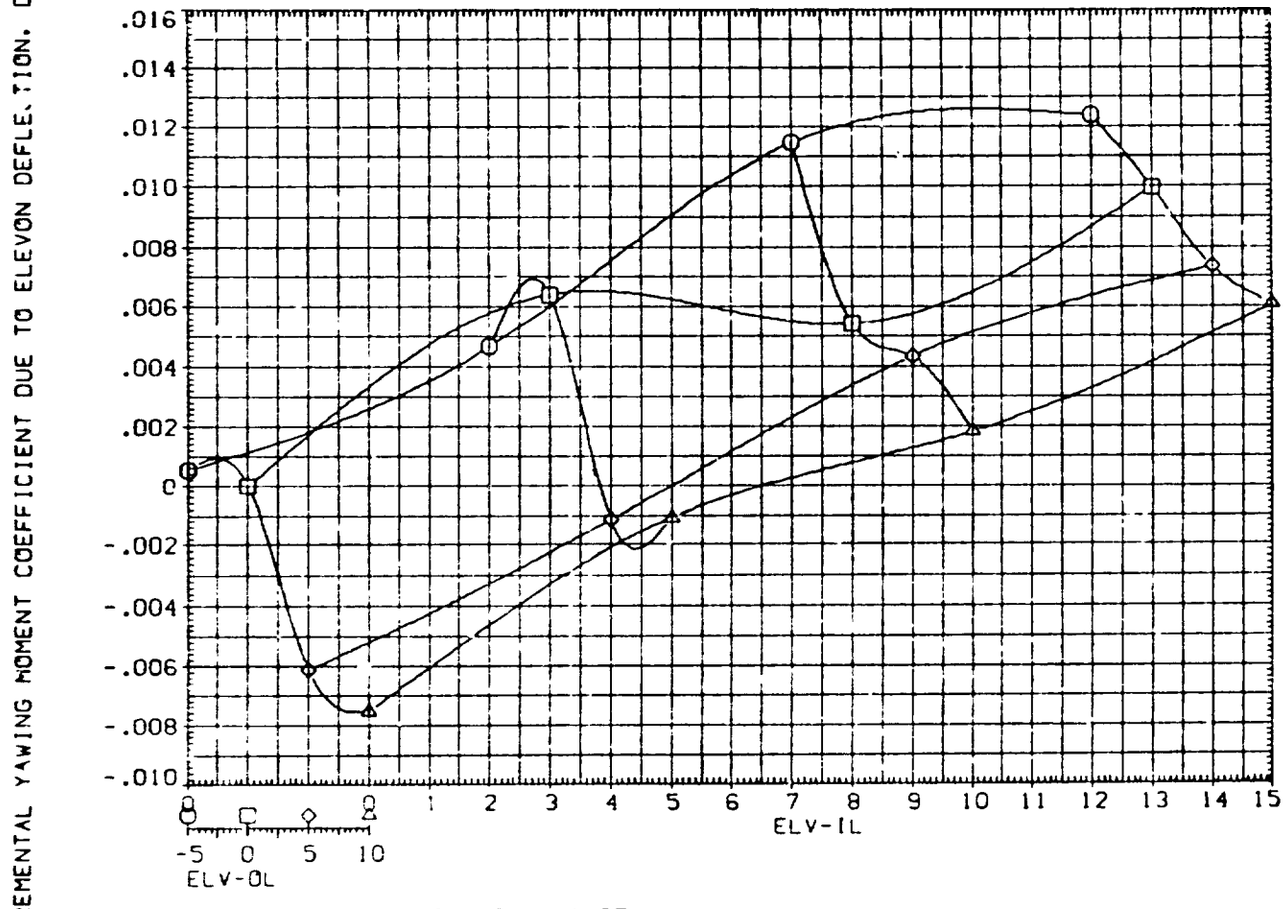
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA=-6.0 (BINDSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2693.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

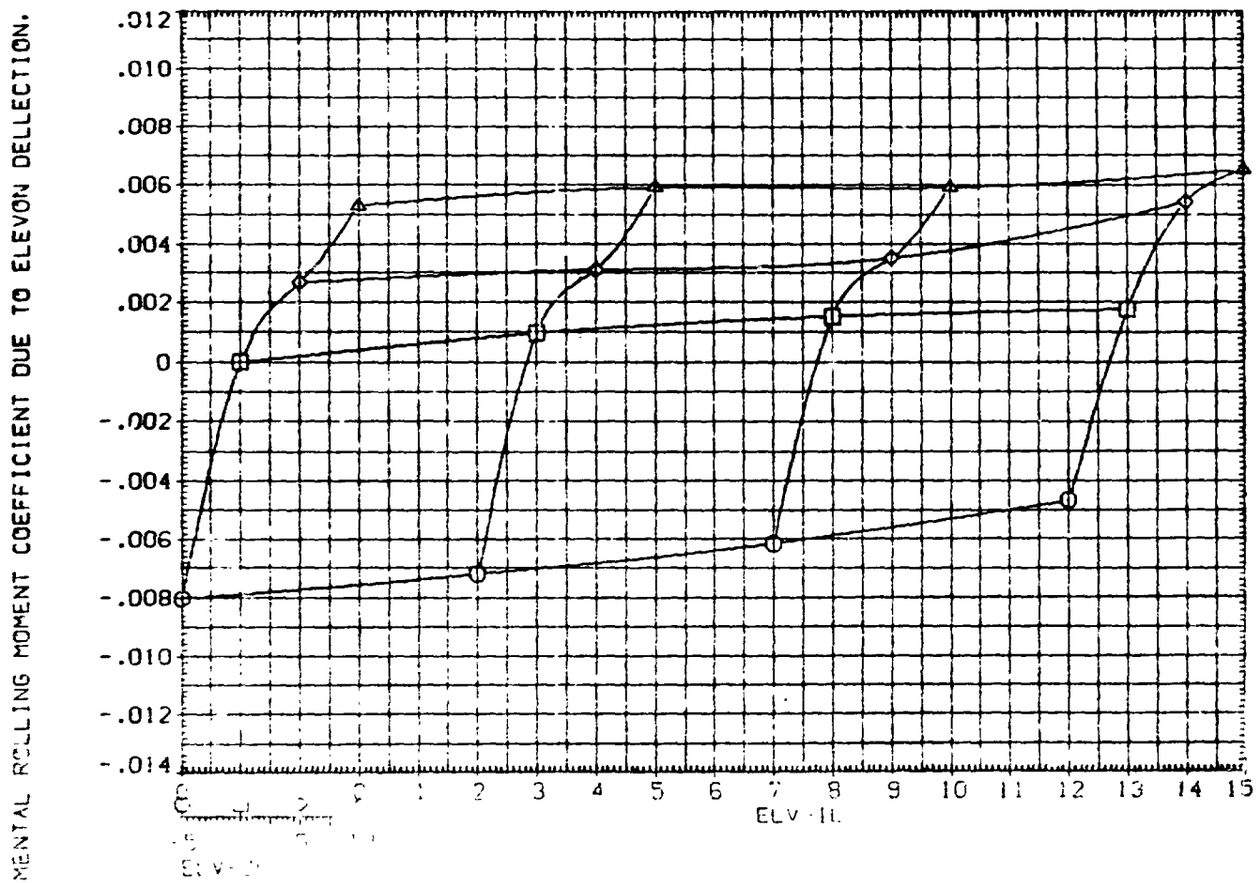
MSFC TWT 622 (LA125) 74 DTS, M=1.05, ALPHA=-6.0 (BINDSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

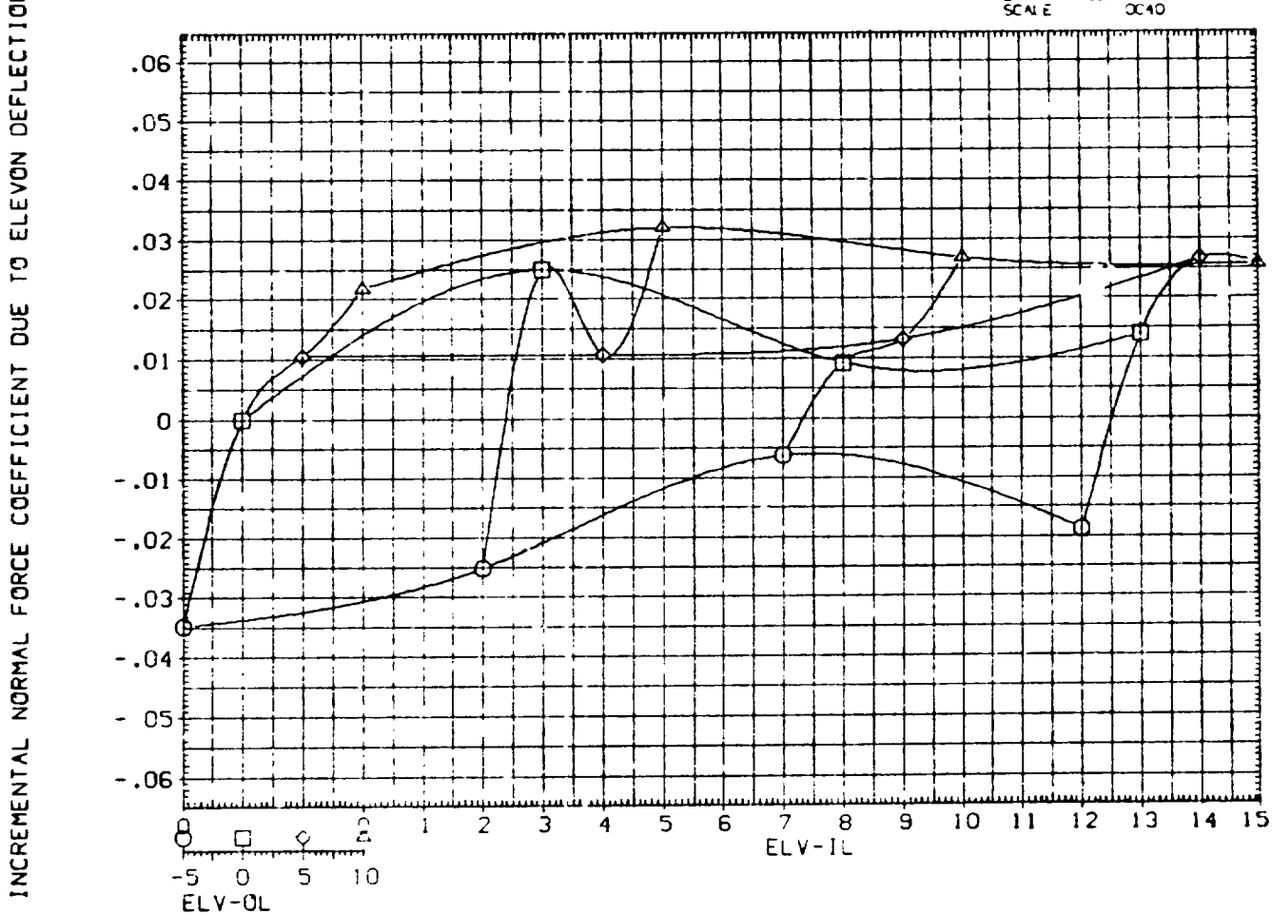
MSFC TWT 622 (IA:25) 74 OTS, M=1.05, ALPHA=-4.0 (BINDSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

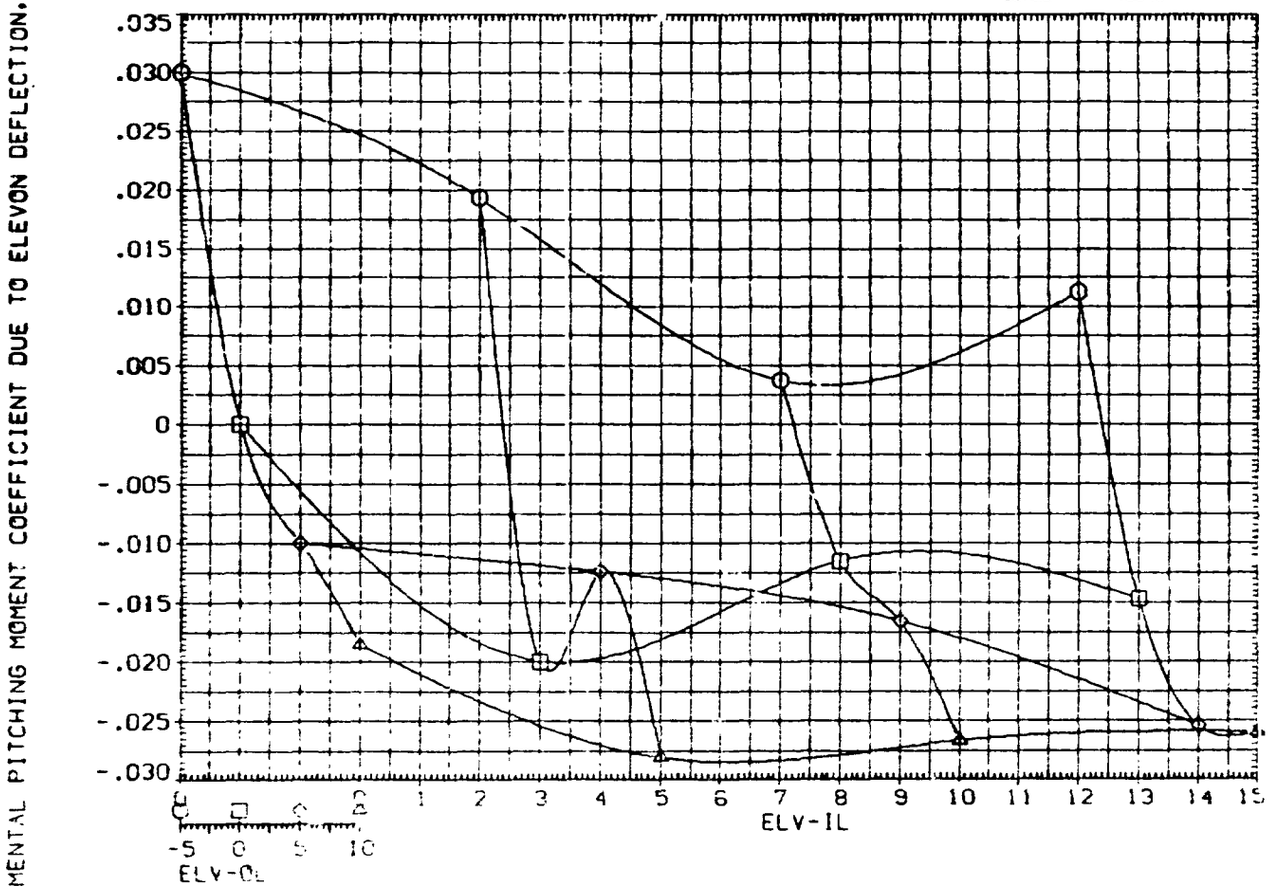
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA=-4.0 (BINDSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

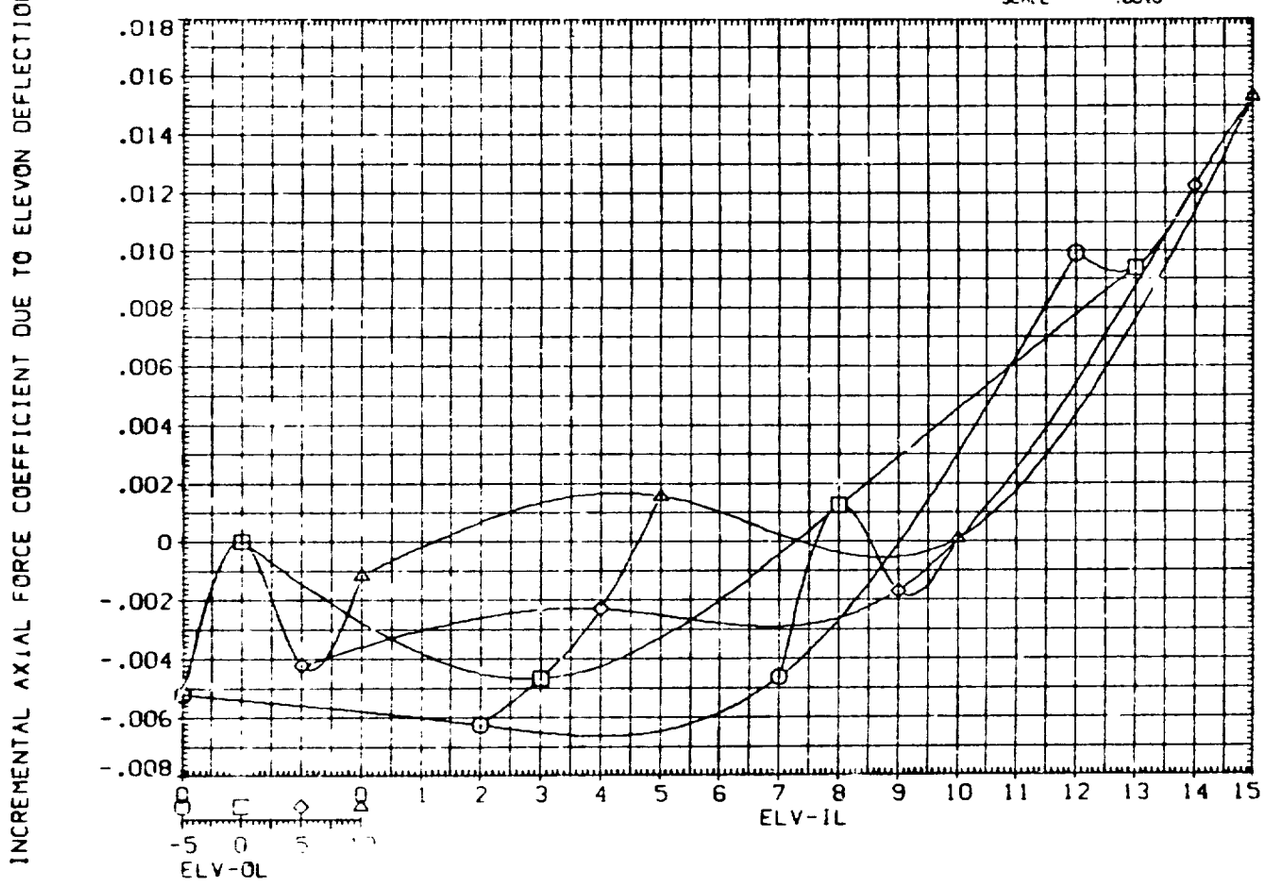
MSFC TWT 622 (IA125) 74 OTS. M=1.05, ALPHA=-4.0 (BINDSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



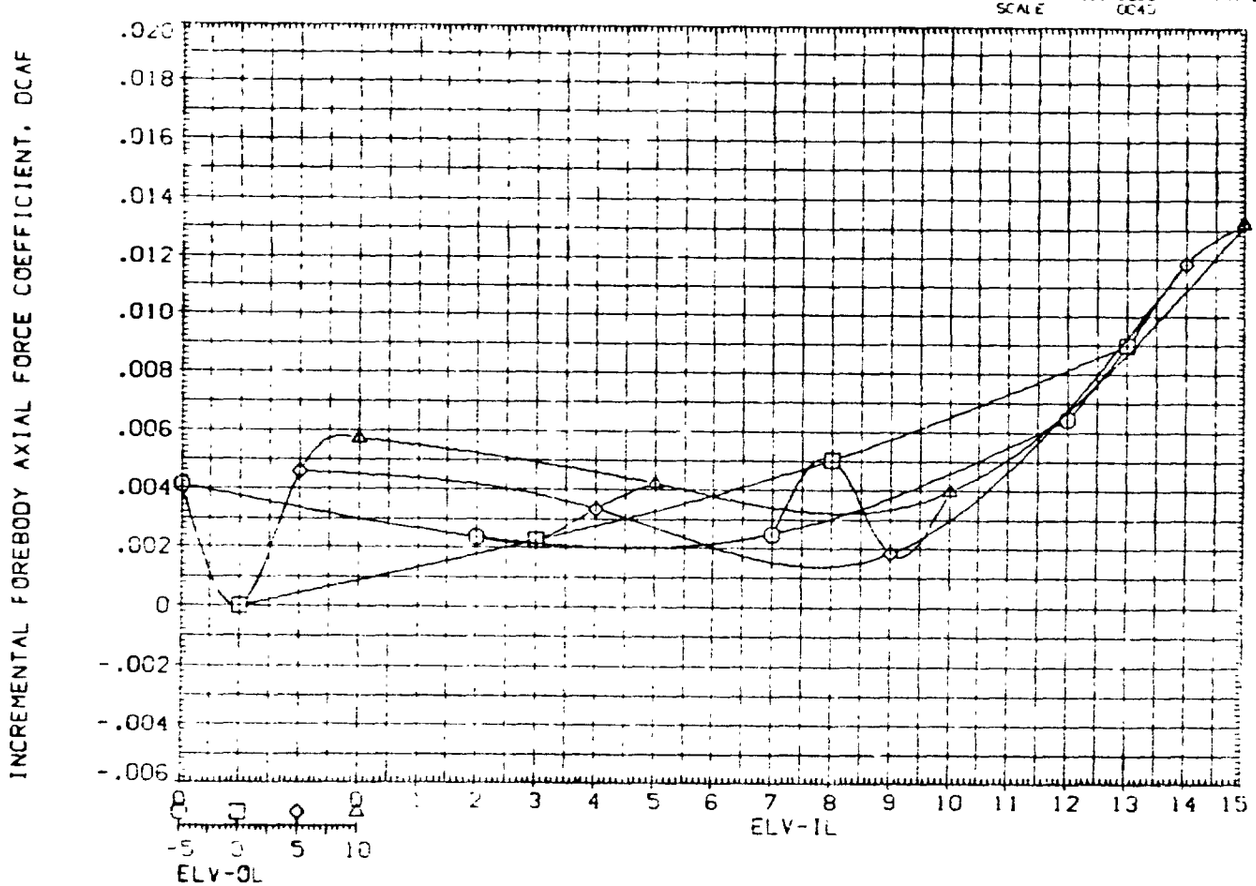
ELEVON EFFECTIVENESS FOR MACH = 1.05

MSFC [illegible] 022 [illegible] 74 [illegible]S. M=1.05, ALPHA=-4.0 (BINDSD)

PARAMETER	VALUES		
BETA	.000	ALPHA	-4.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3700	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

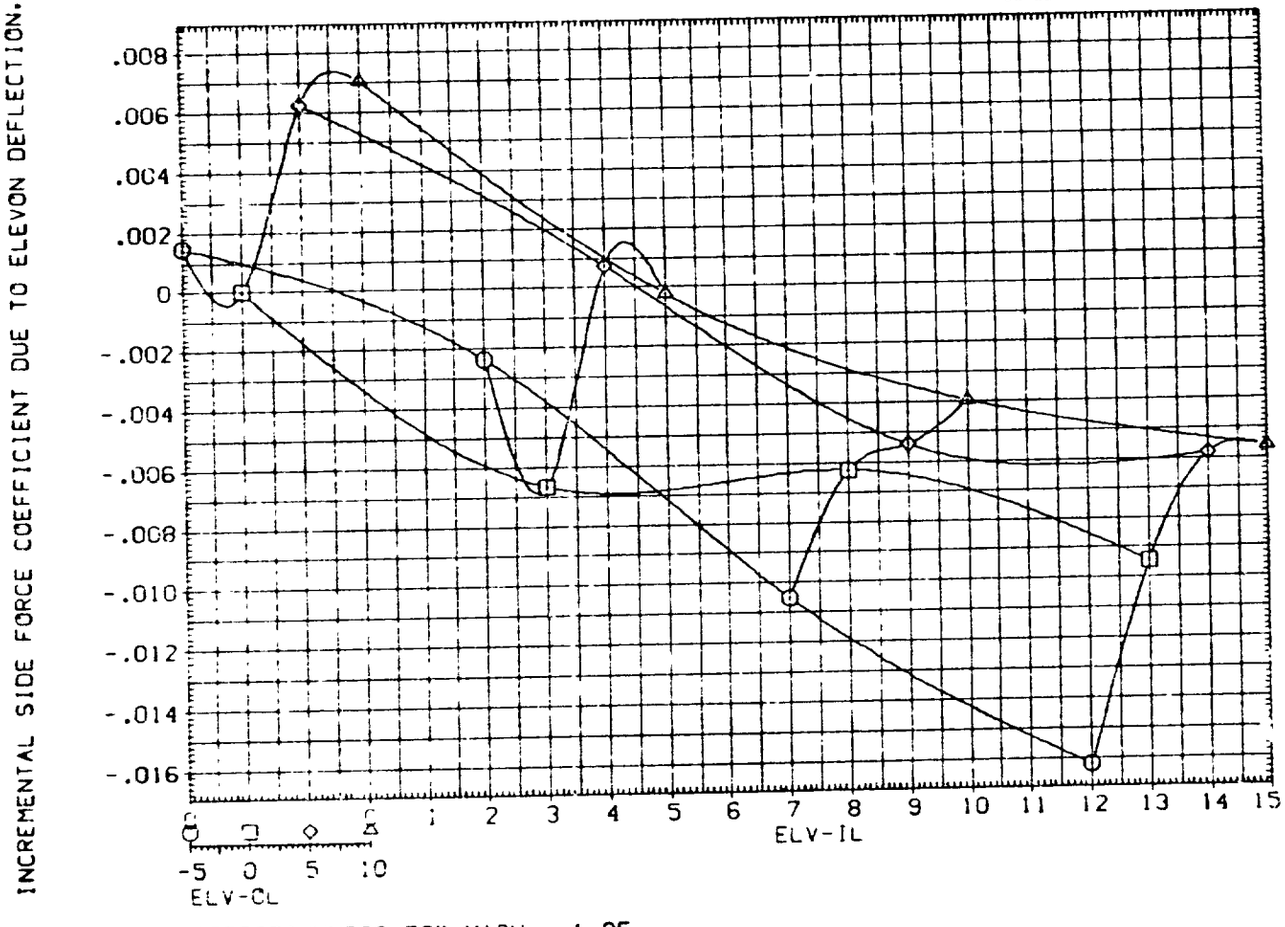
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA=-4.0 (BINDSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

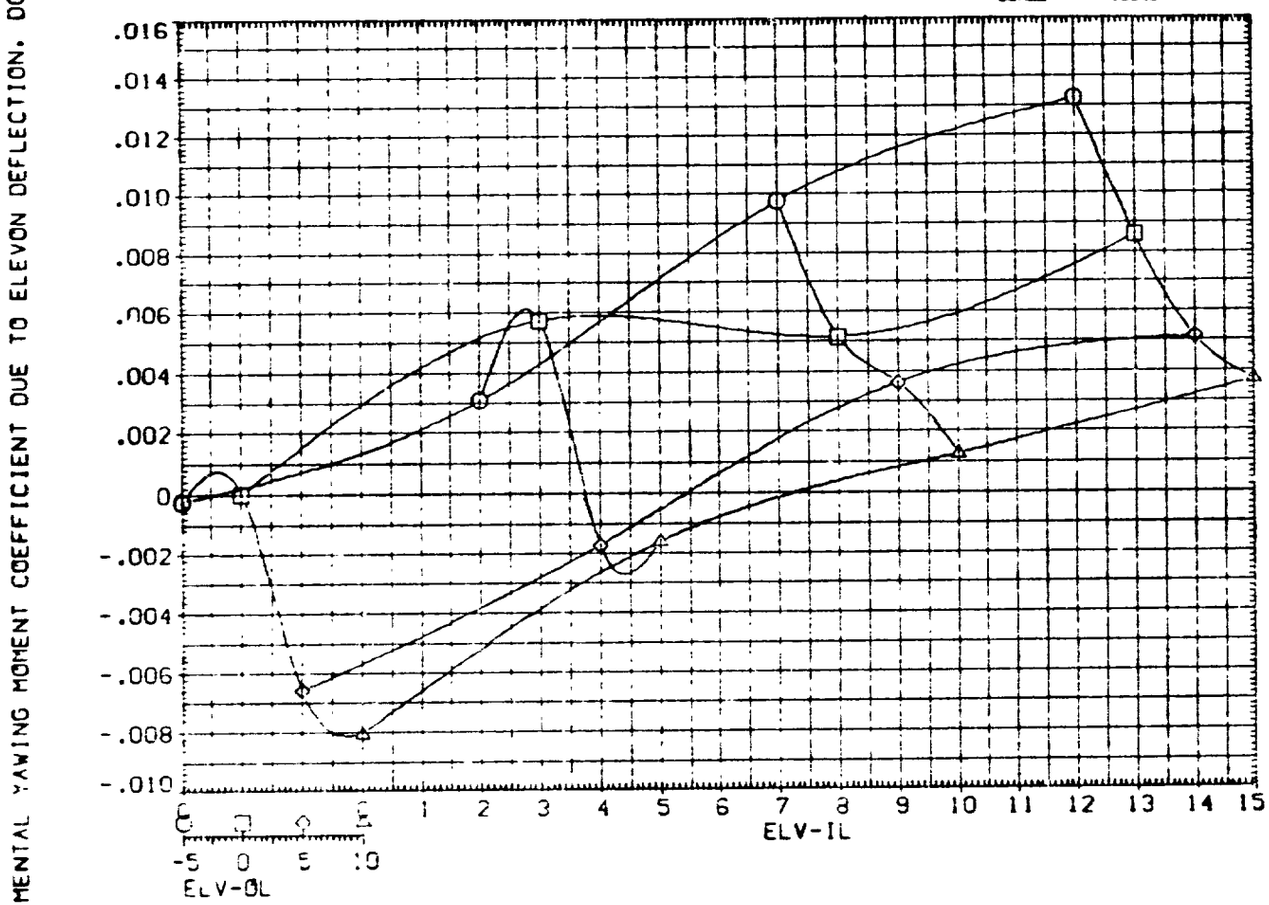
MSFC TWT 622 (!A125) 74 OTS. M=1.05, ALPHA=-4.0 (BINDSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

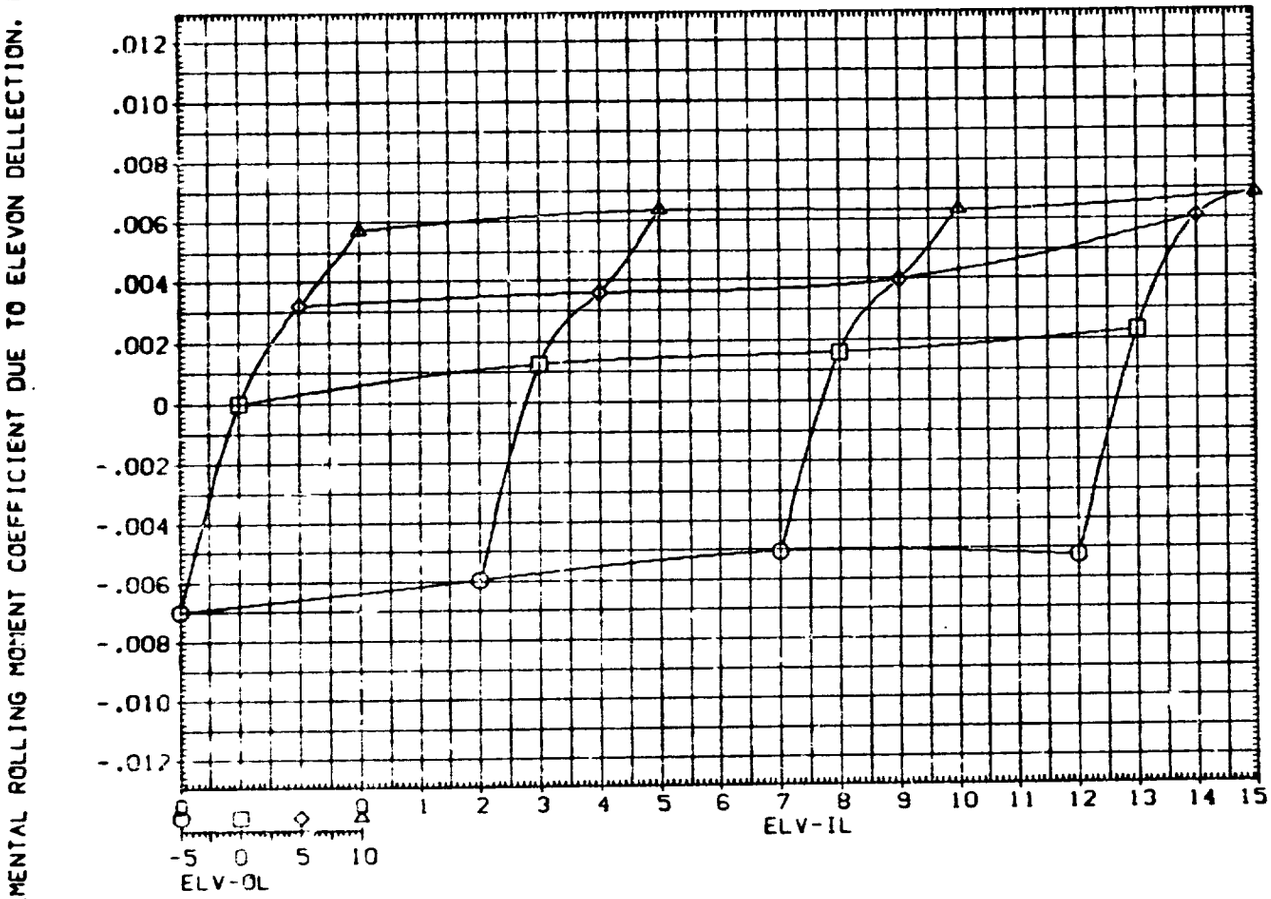
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA=-4.0 (BINDSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

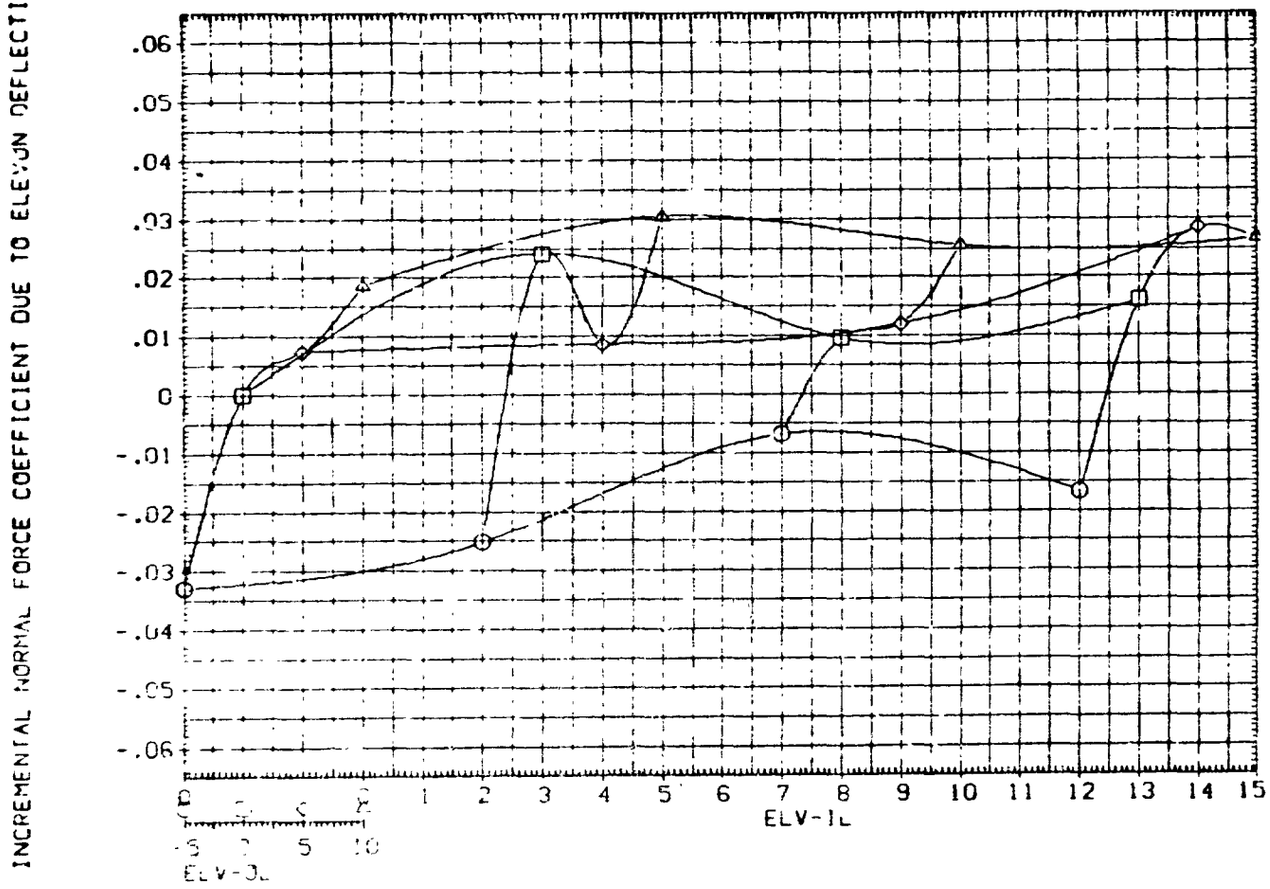
MSFC TWT 822 (.A:25, 74 PTS, M=1.05, ALPHA=-2.0 (BINDSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.050	ELV-1R	.000
ELV-3R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

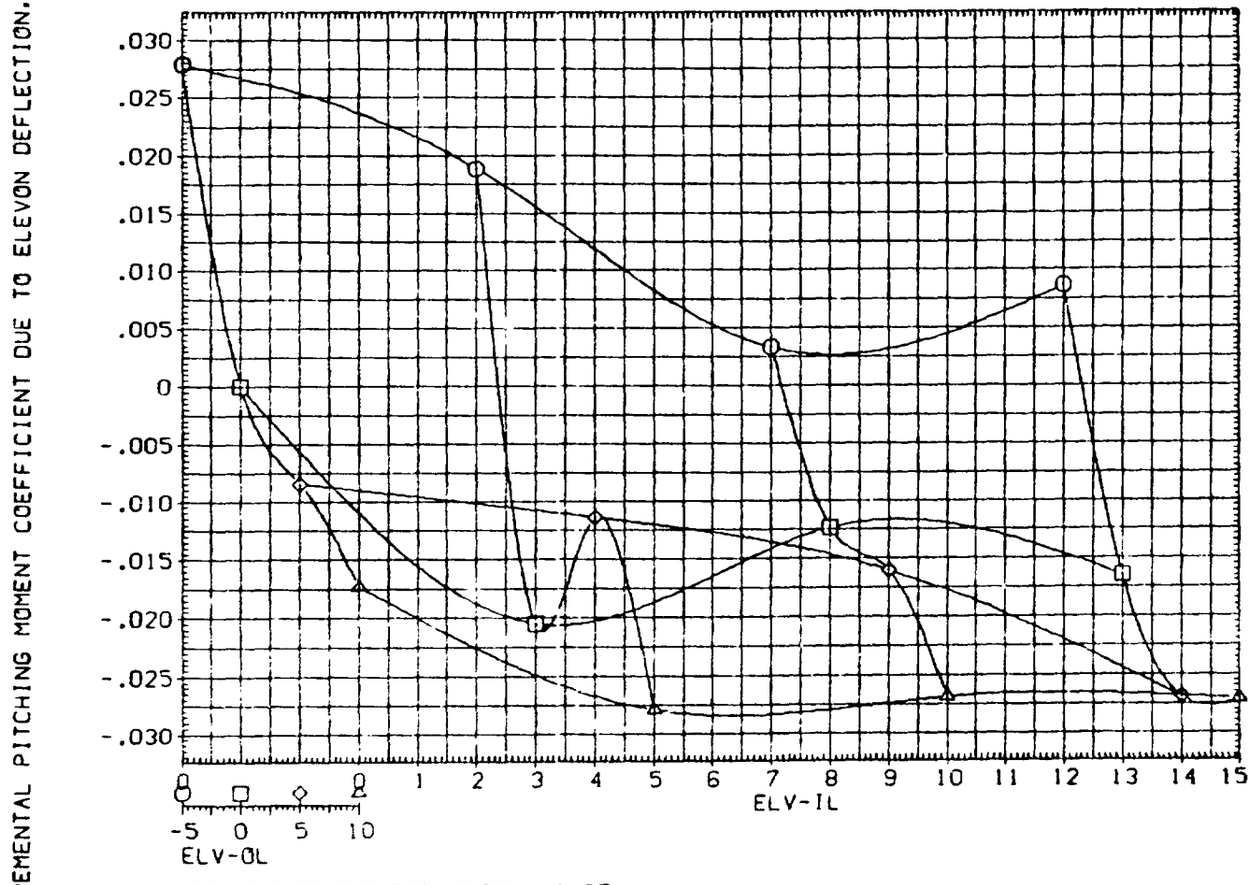
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA=-2.0 (BINDSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

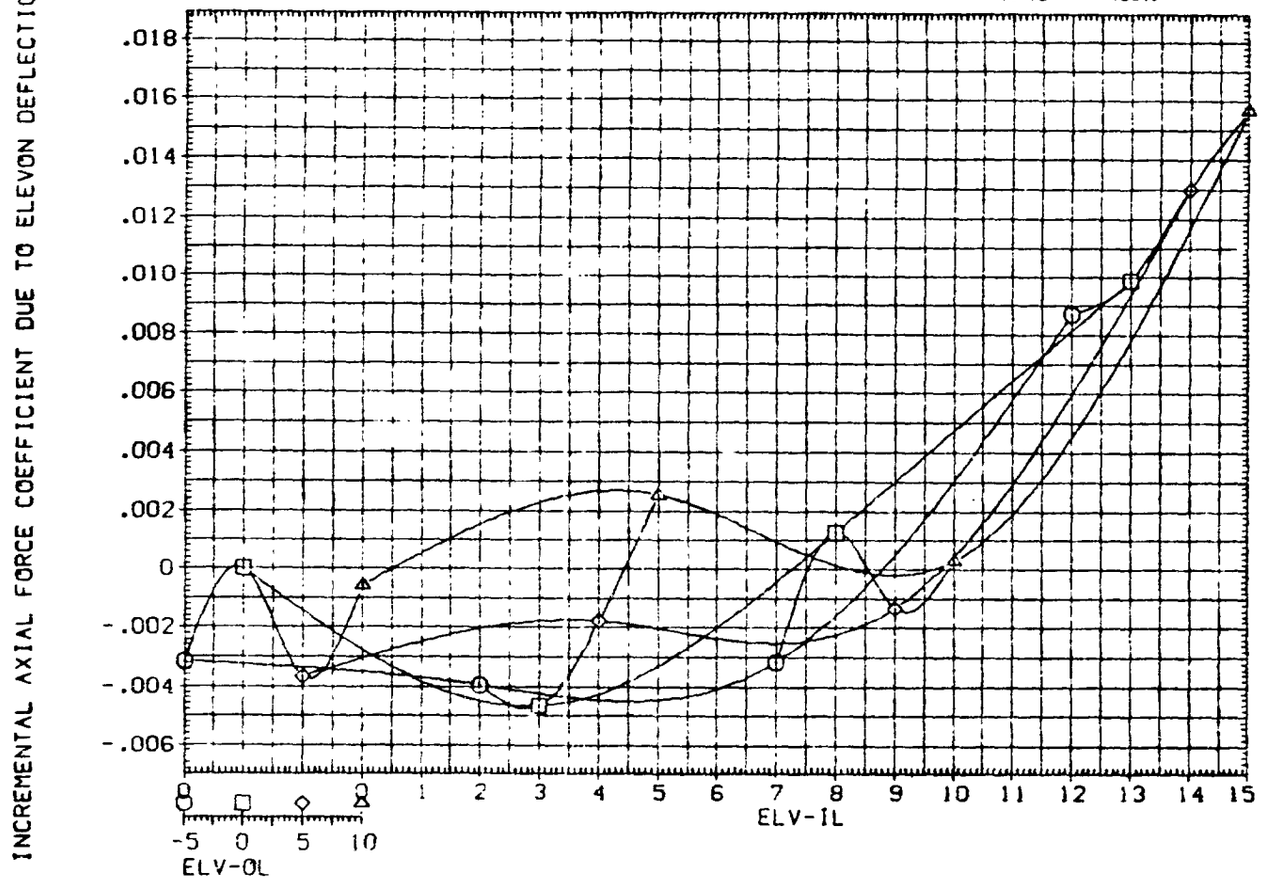
MSFC TWT 622 (A125) 74 OTS. M=1.05. ALPHA=-2.0 (BINOSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

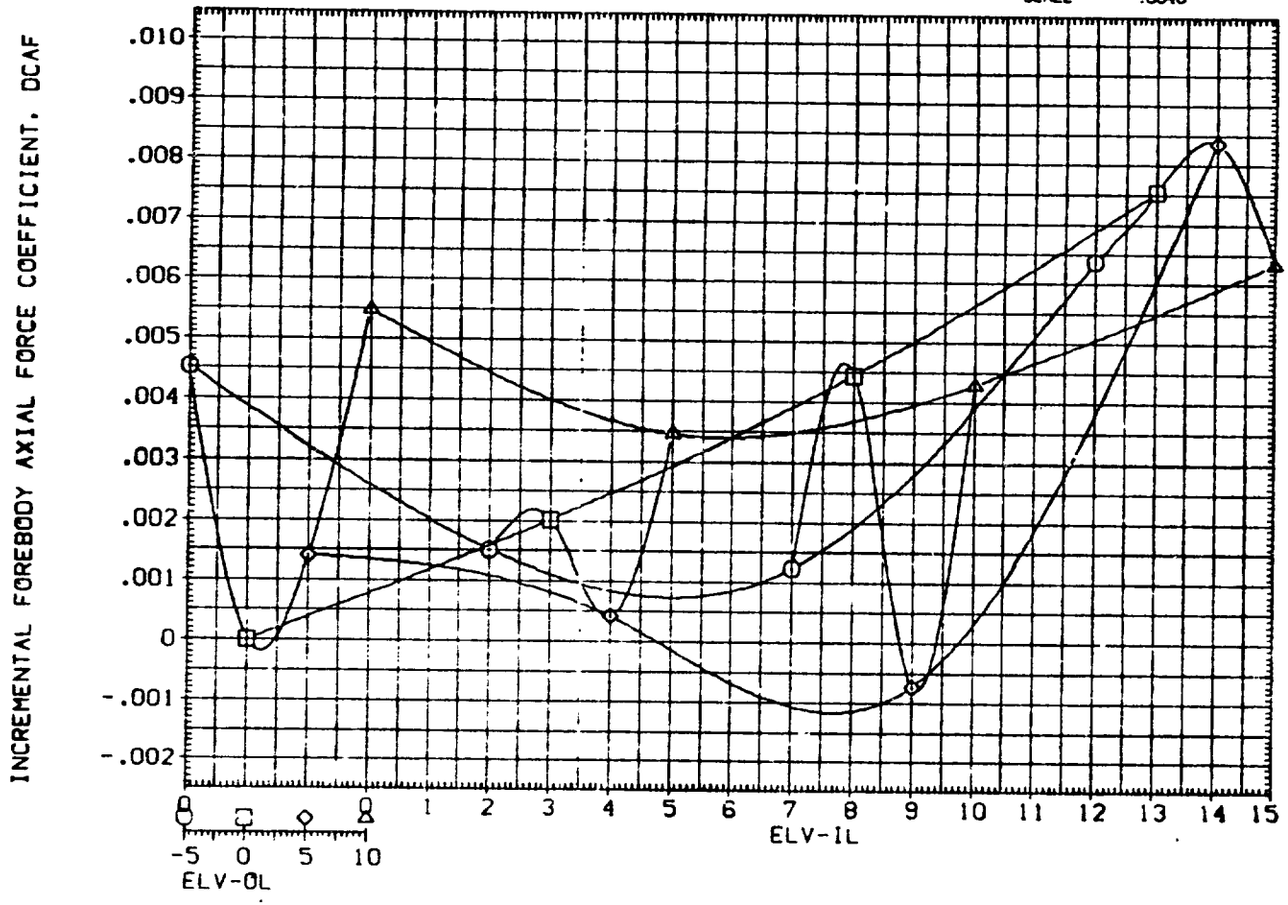
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA=-2.0 (BINDSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.00
MACH	1.050	ELV-IR	.00
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

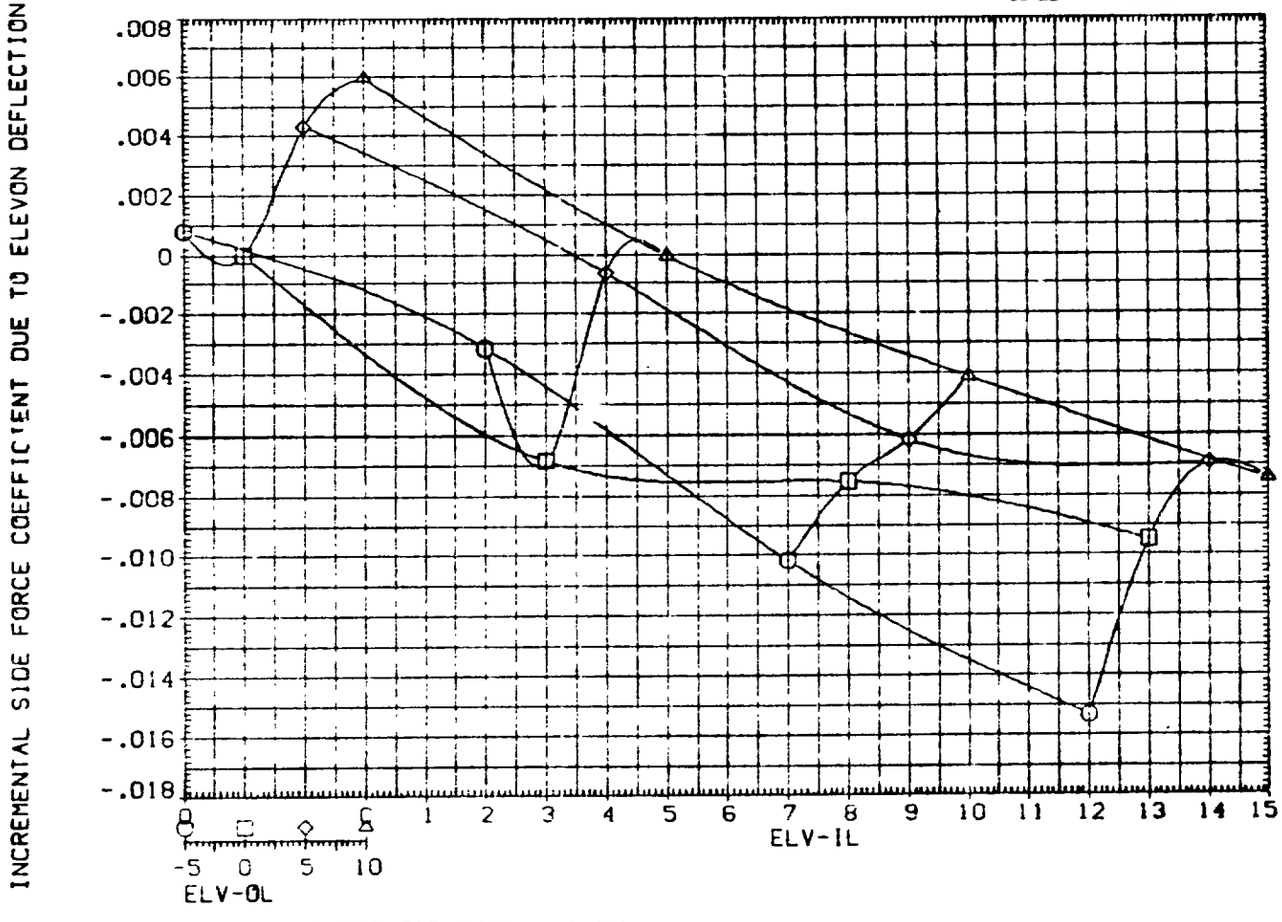
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA=-2.0 (BINDSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

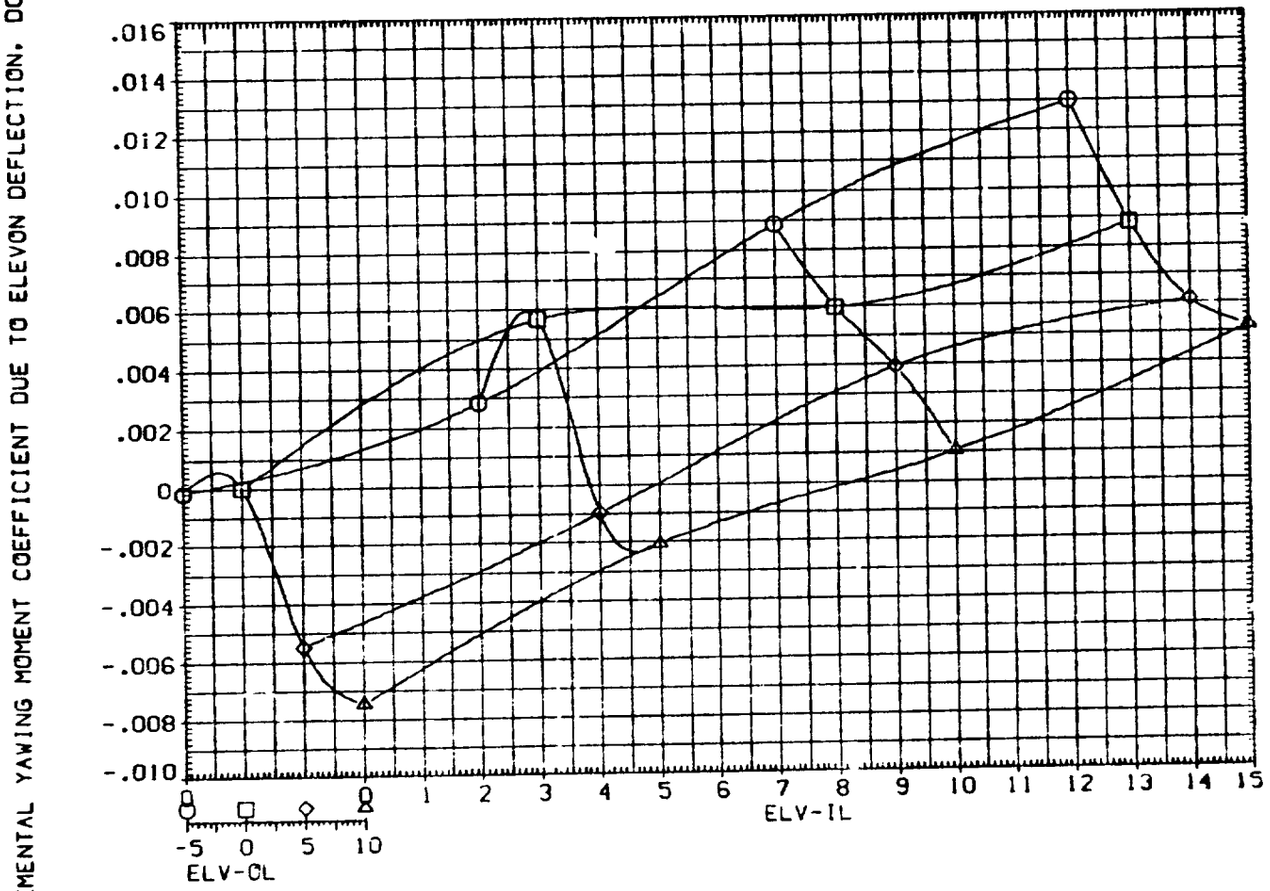
MSFC TWT 622 (!A125) 74 OTS, M=1.05, ALPHA=-2.0 (BINDSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	" ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

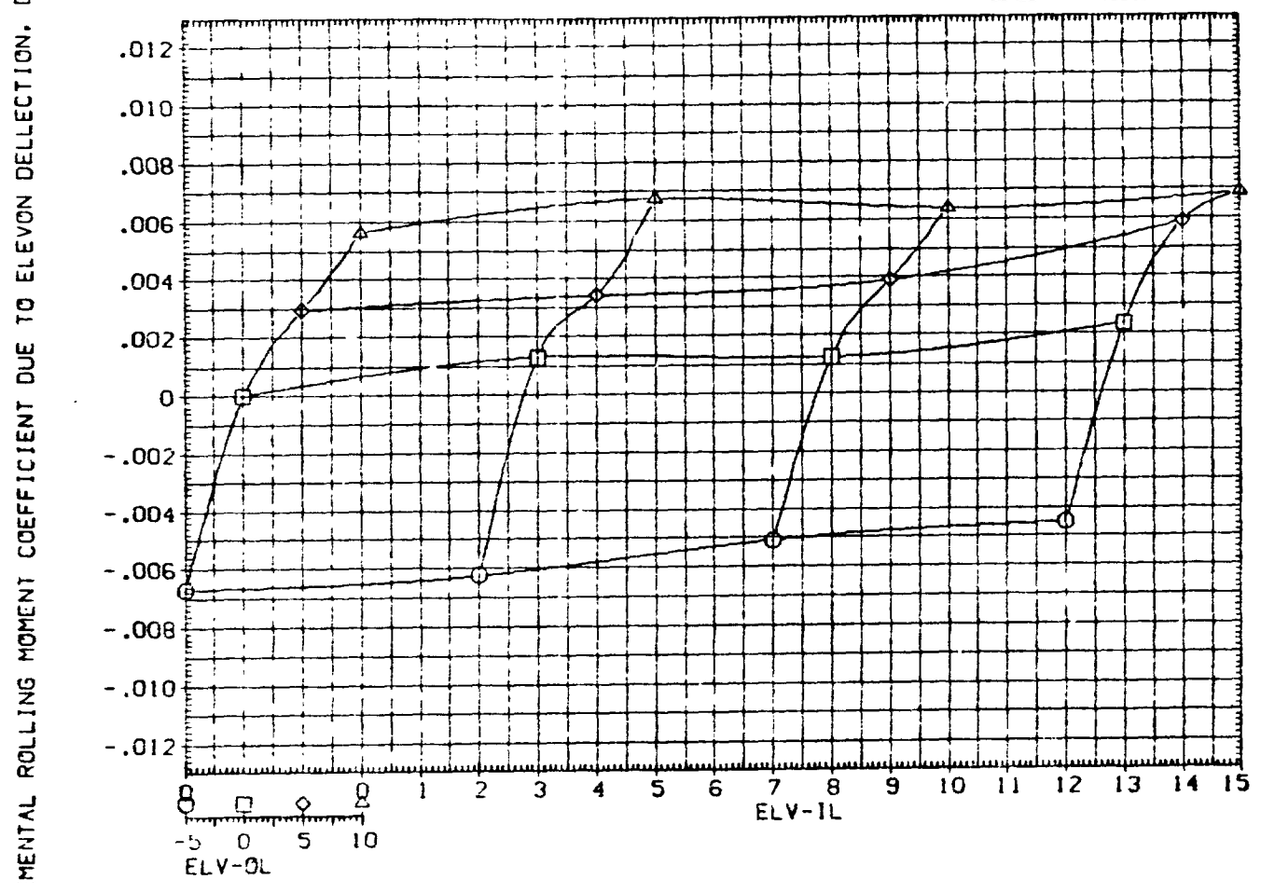
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA=-2.0 (BINDSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

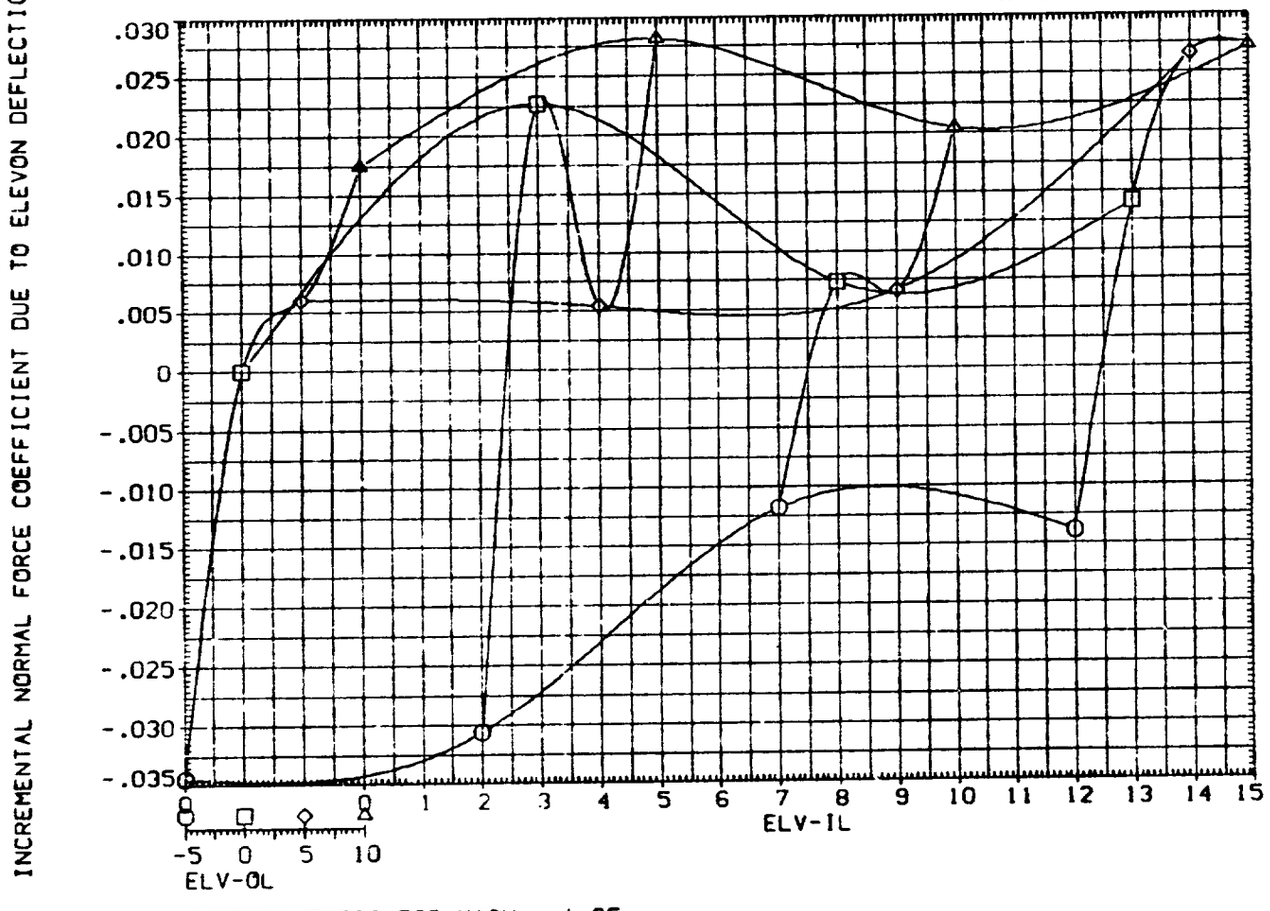
MSFC TWT 622 (1A125) 74 OTS. M=1.05. ALPHA= 0.0 (BINDSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	7690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

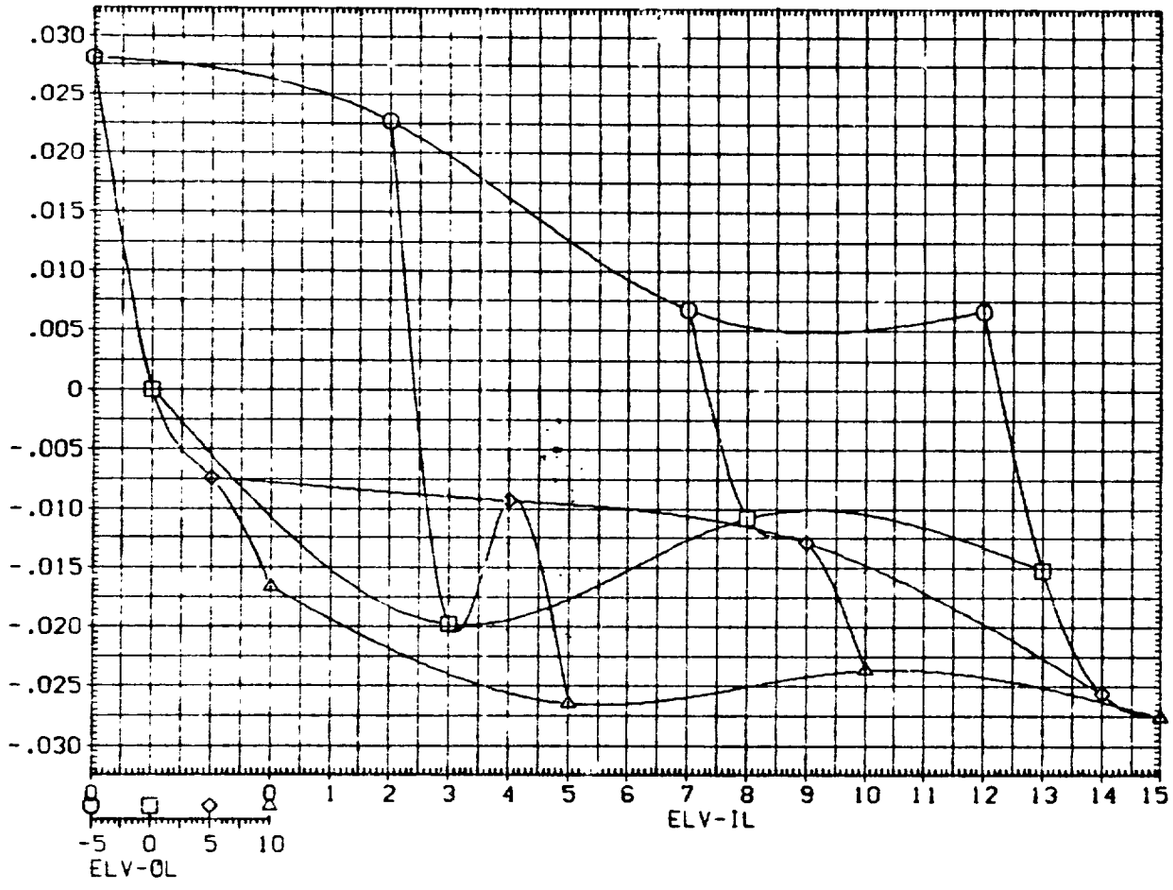
MSFC T#T 622 (IA125) 74 OTS. M=1.05. ALPHA= 0.0 (BINDSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

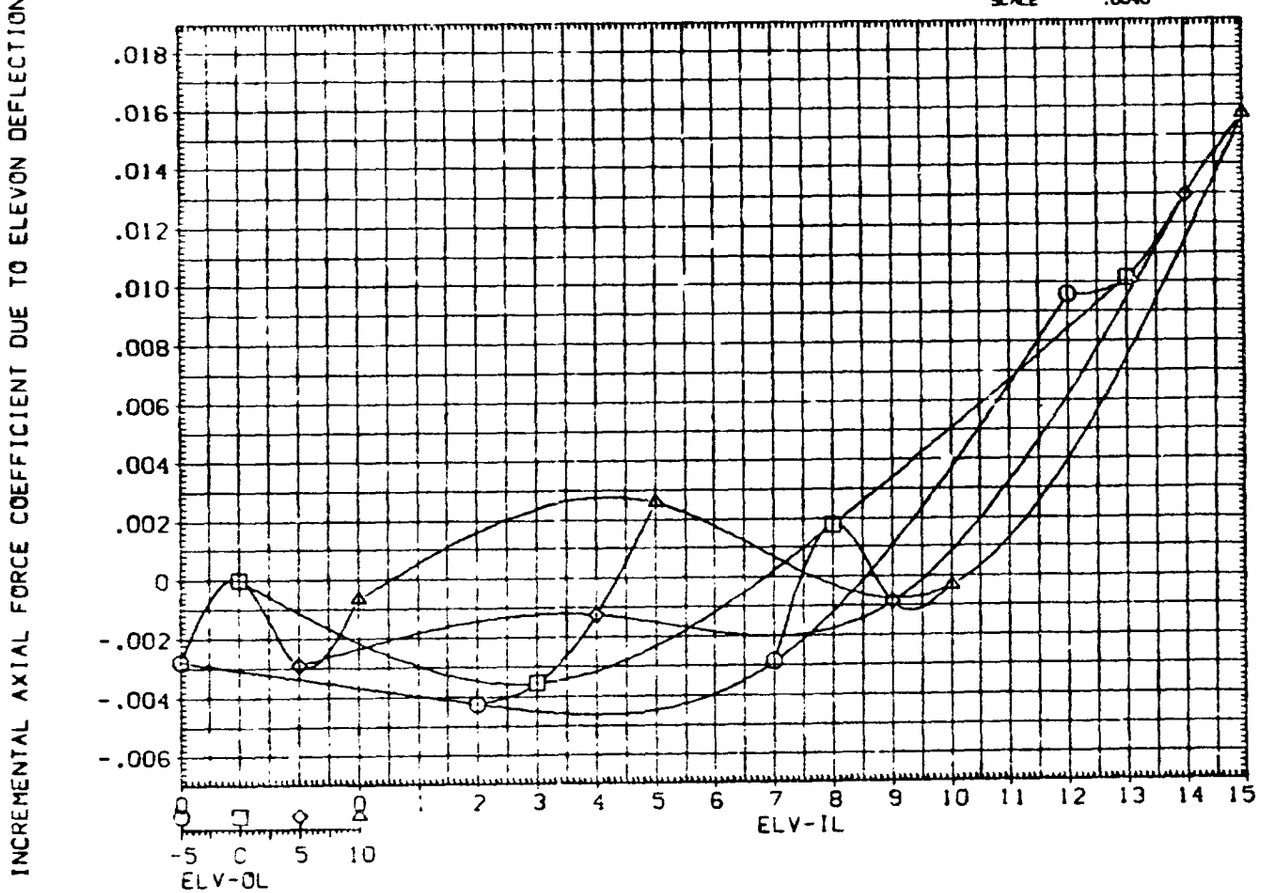
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA= 0.0 (BINDSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

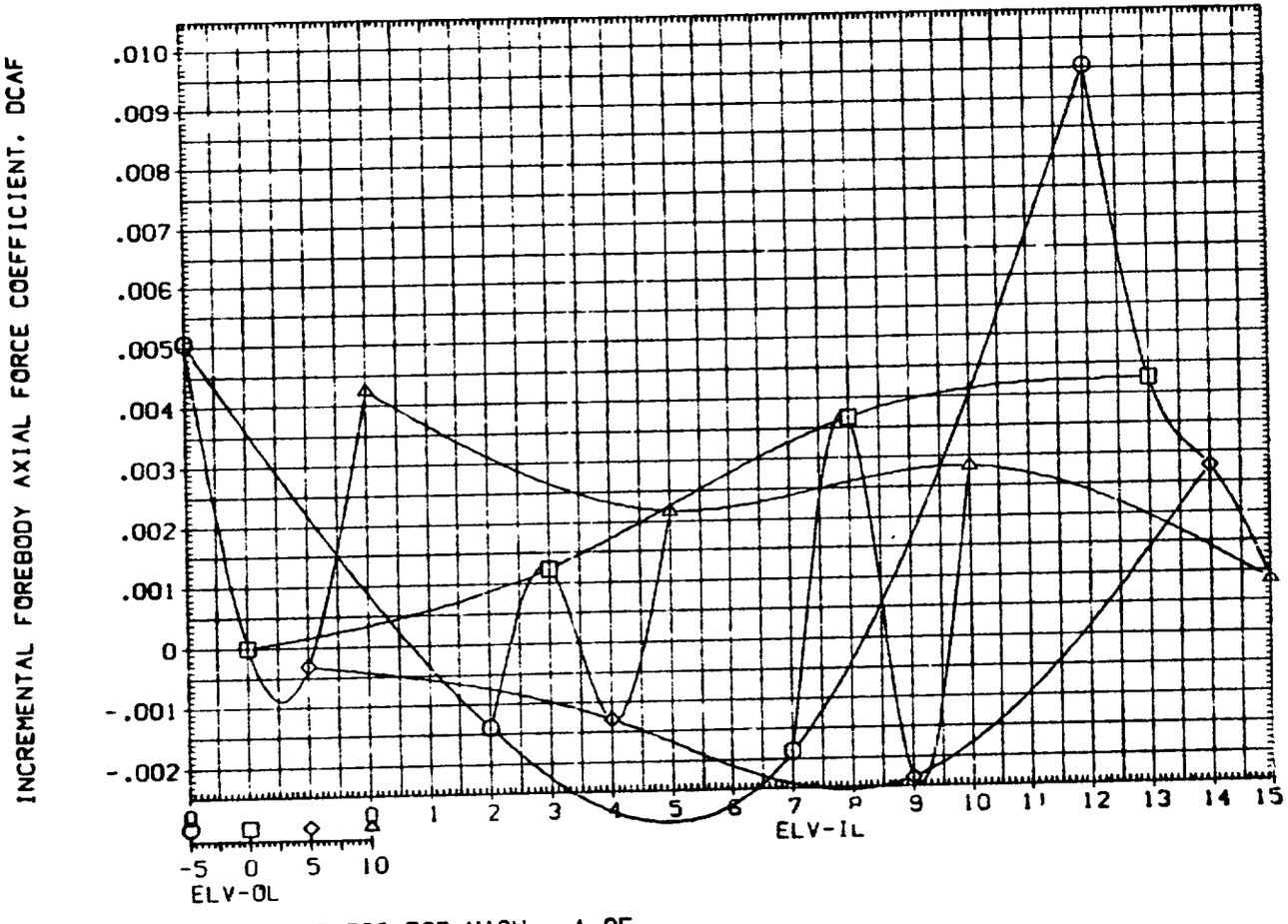
MSFC TWT 622 (IA:253) 74 OTS, M=1.05, ALPHA= 0.0 (BINDSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

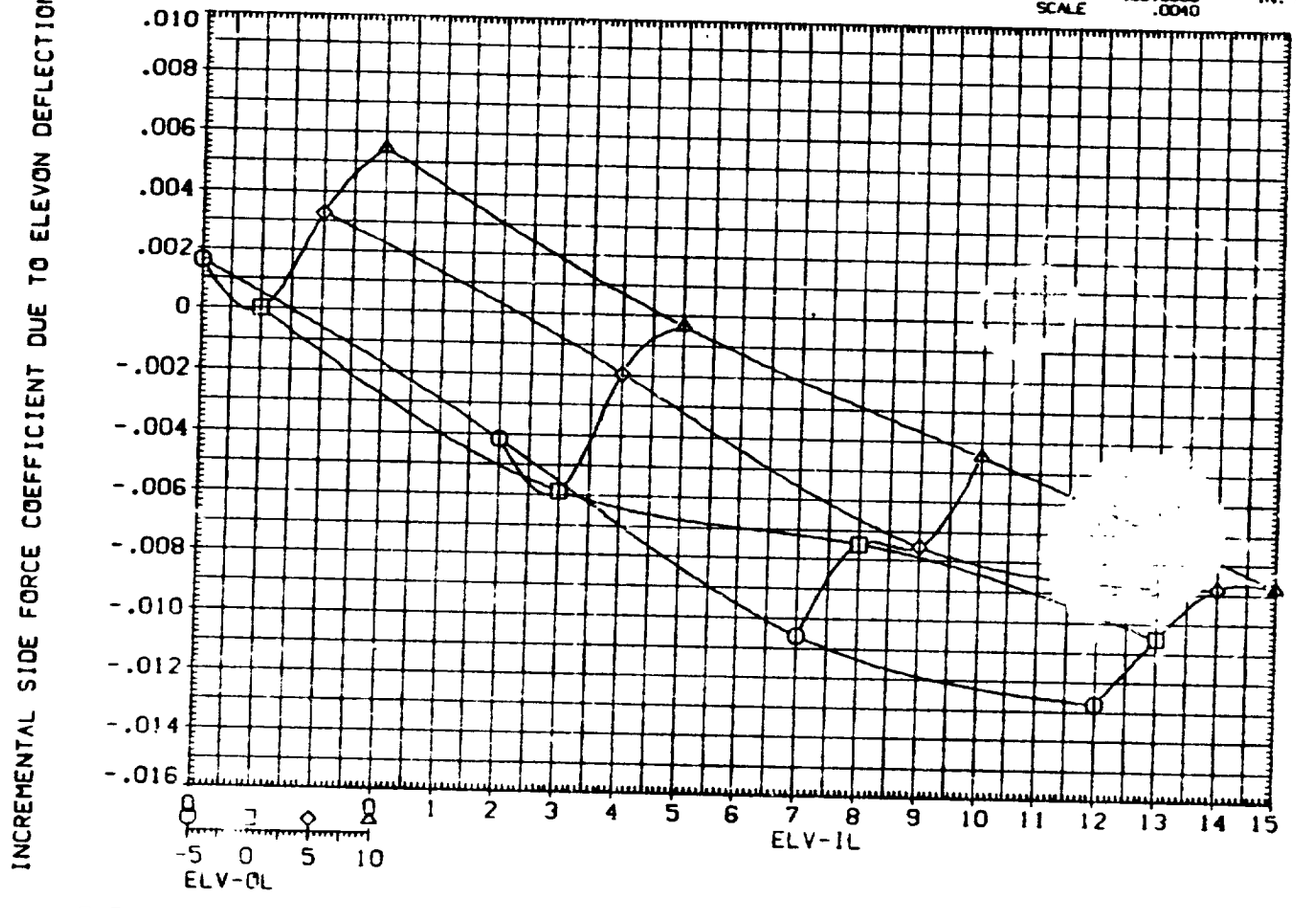
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 0.0 (BINDSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

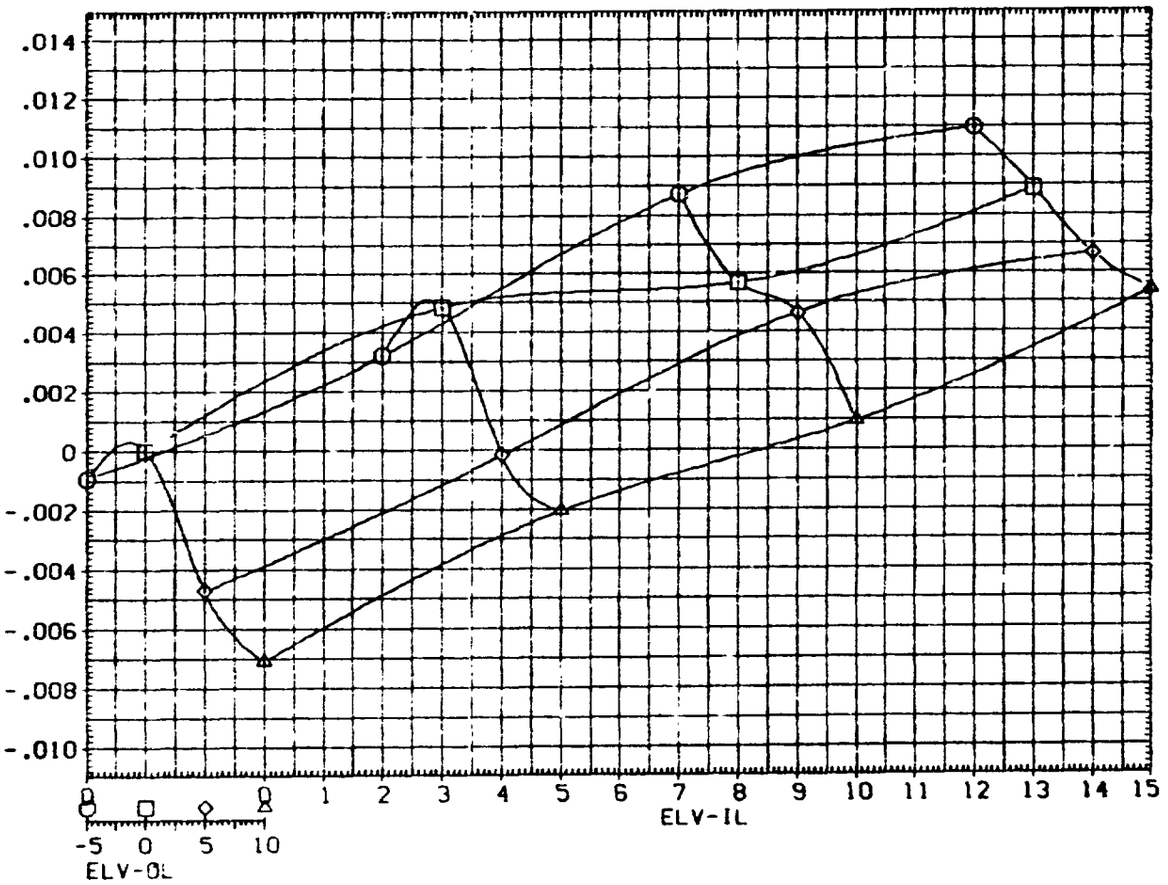
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 0.0 (BINDSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

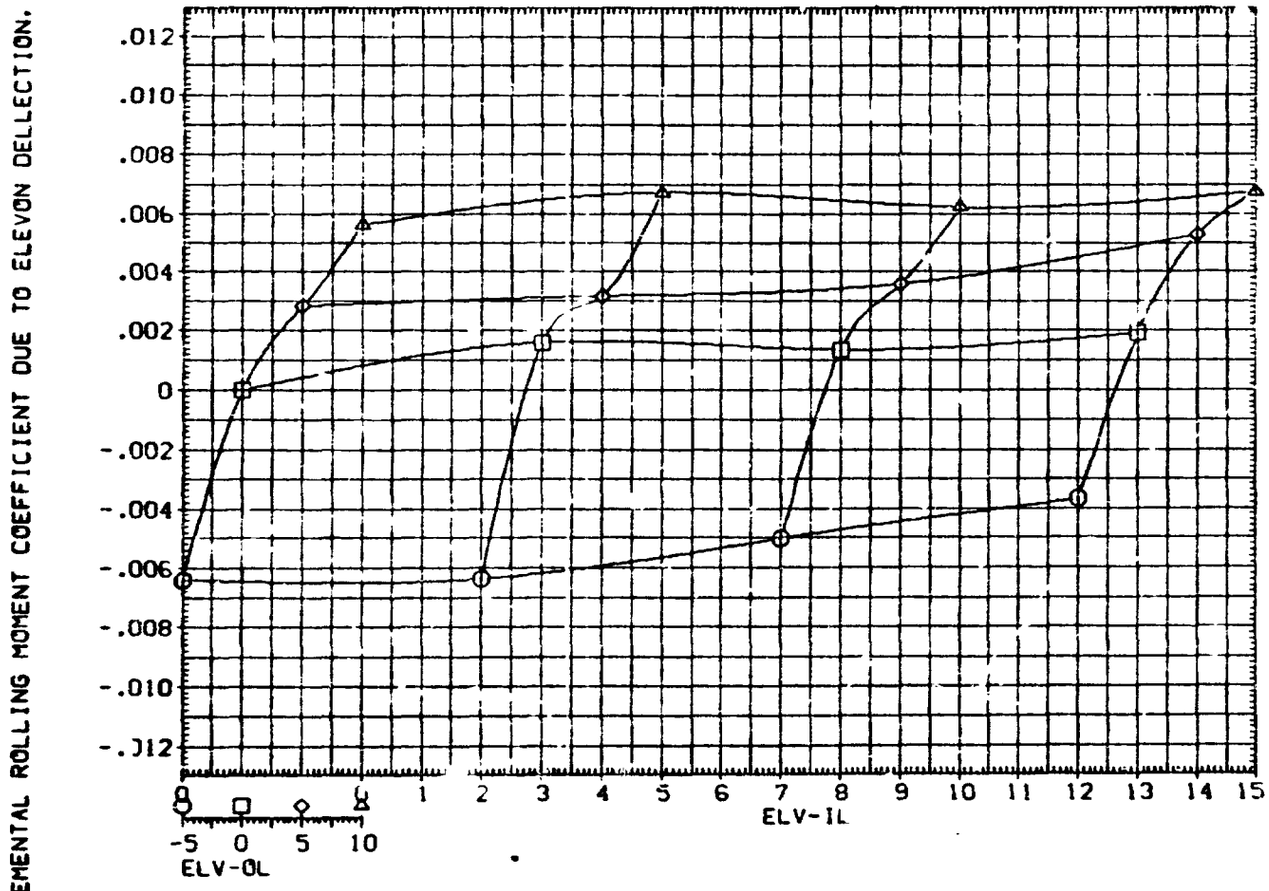
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA= 0.0 (BINDSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

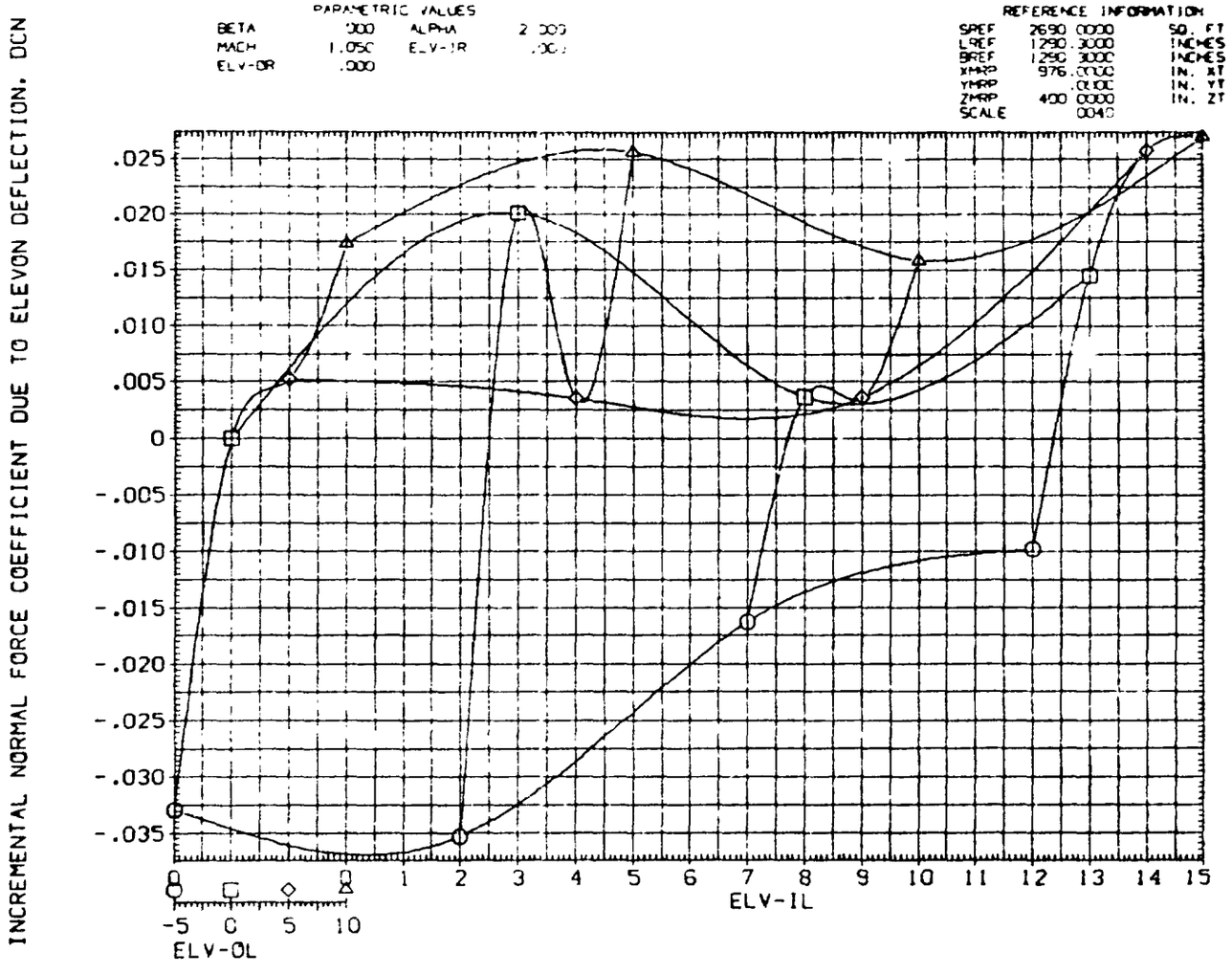
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 2.0 (BINDSG)



ELEVON EFFECTIVENESS FOR MACH = 1.05

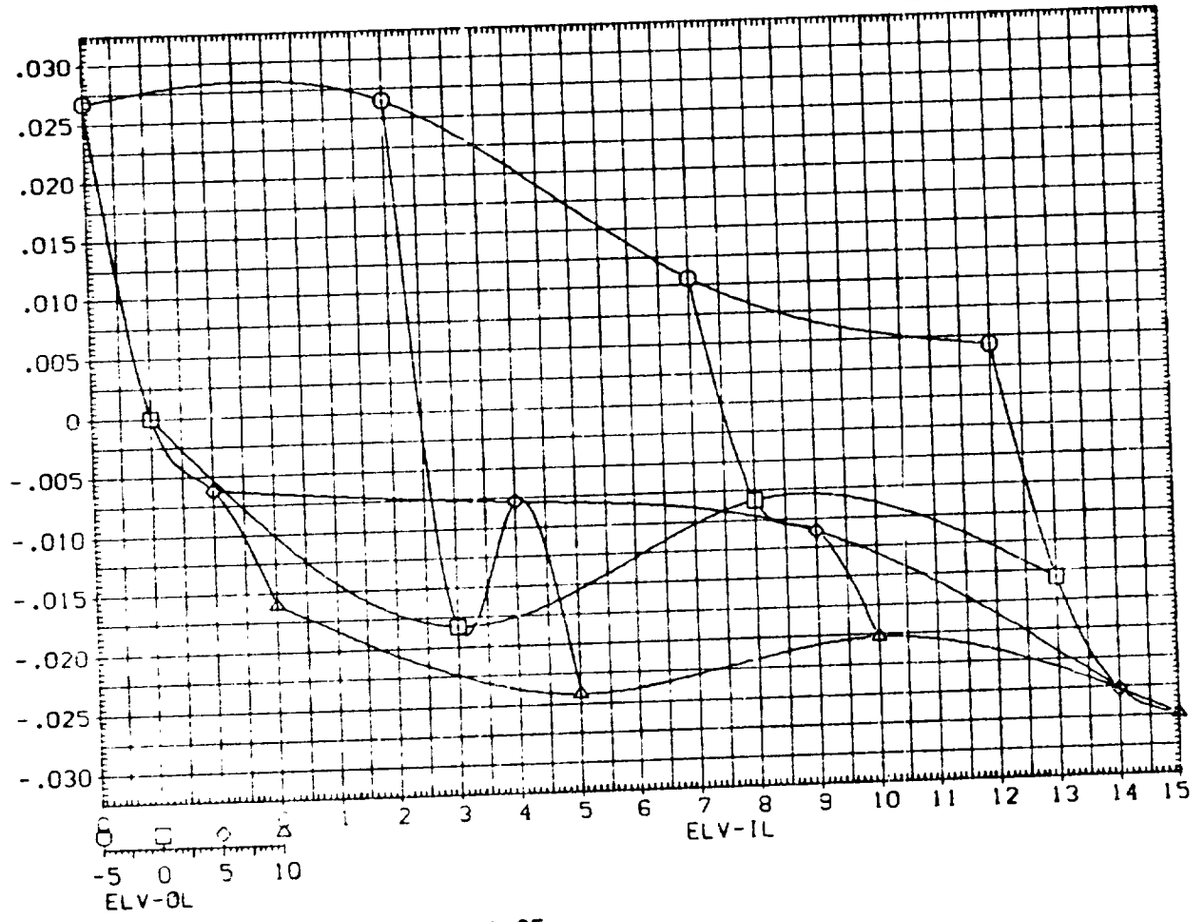
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 2.0 (BINDSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

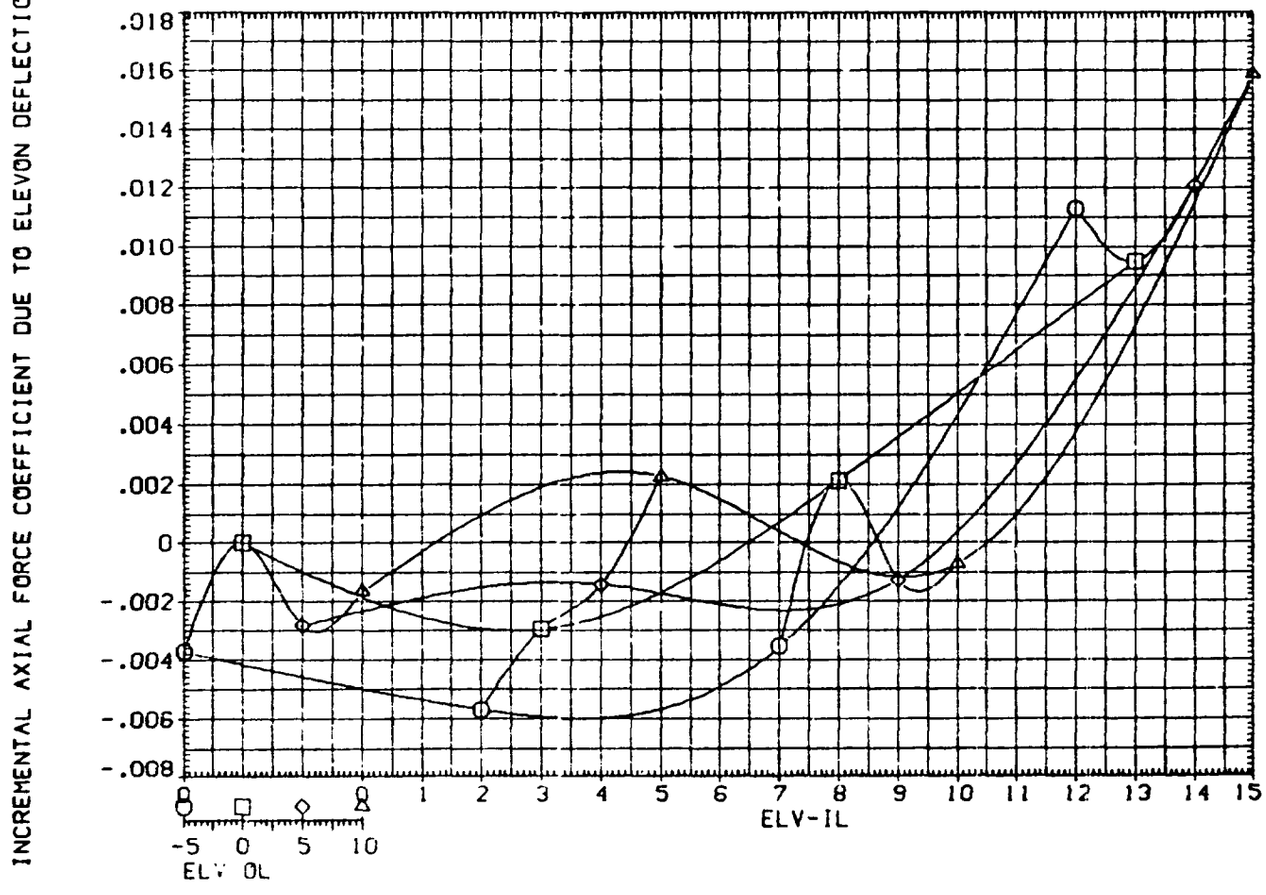
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA= 2.0 (BINDSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

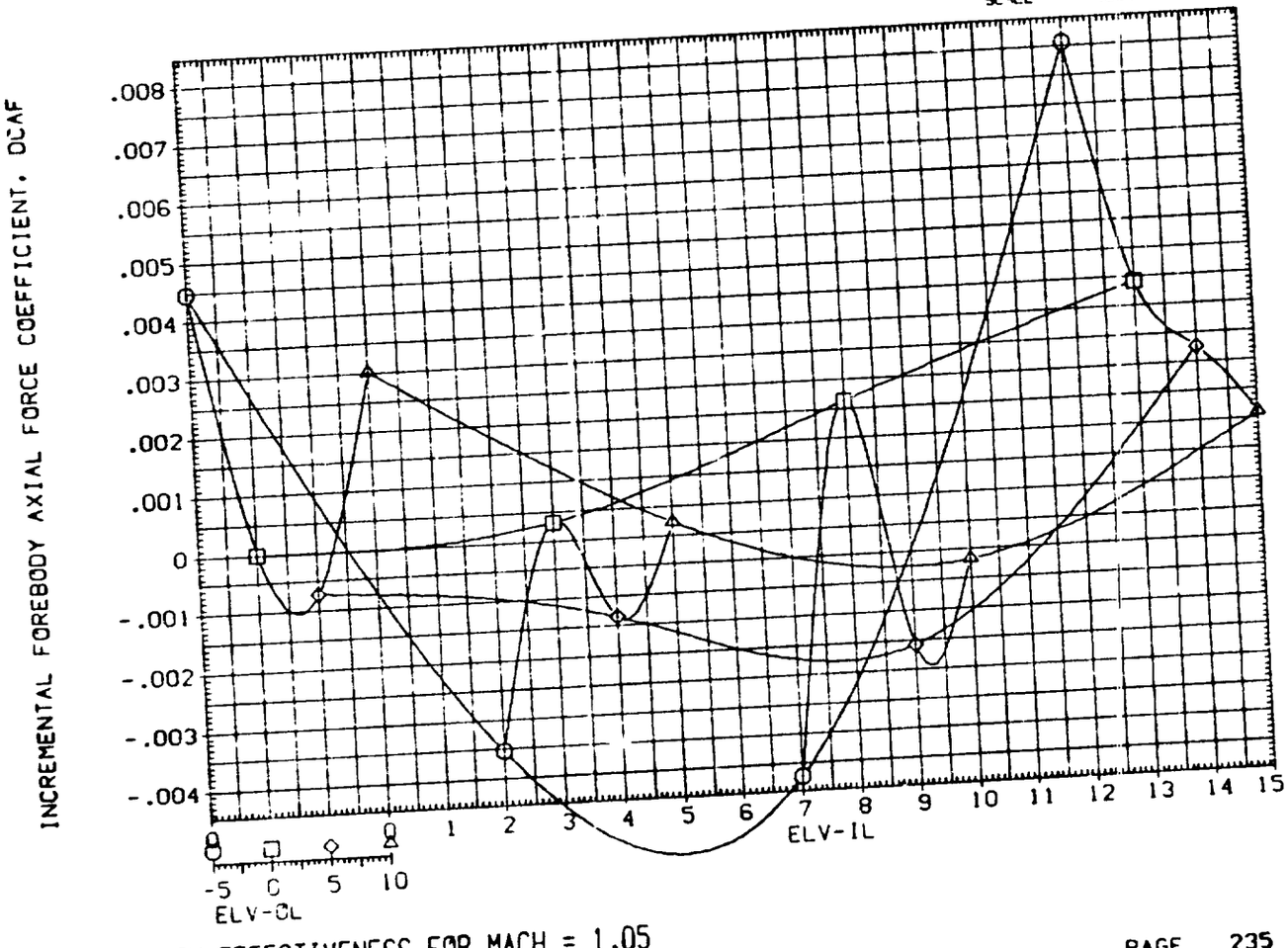
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 2.0 (BINDSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.050	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ FT
LREF	1290.3100	INCHES
BREF	1290.3100	INCHES
XMRP	976.0100	IN. XT
YMRP	.0100	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

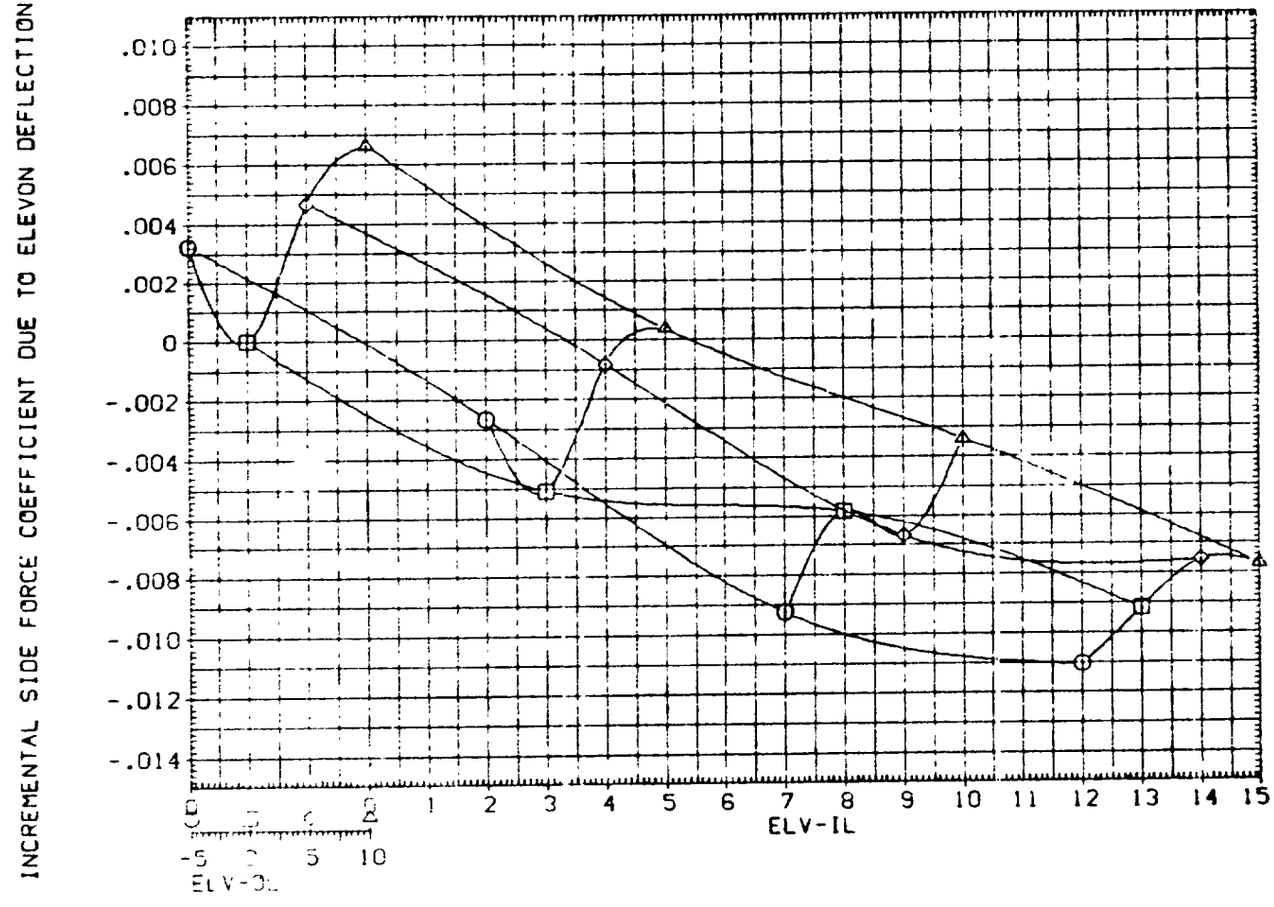
MSFC TWT 622 (1A125) 74 OTS. M=1.05. ALPHA= 2.0 (BINDSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

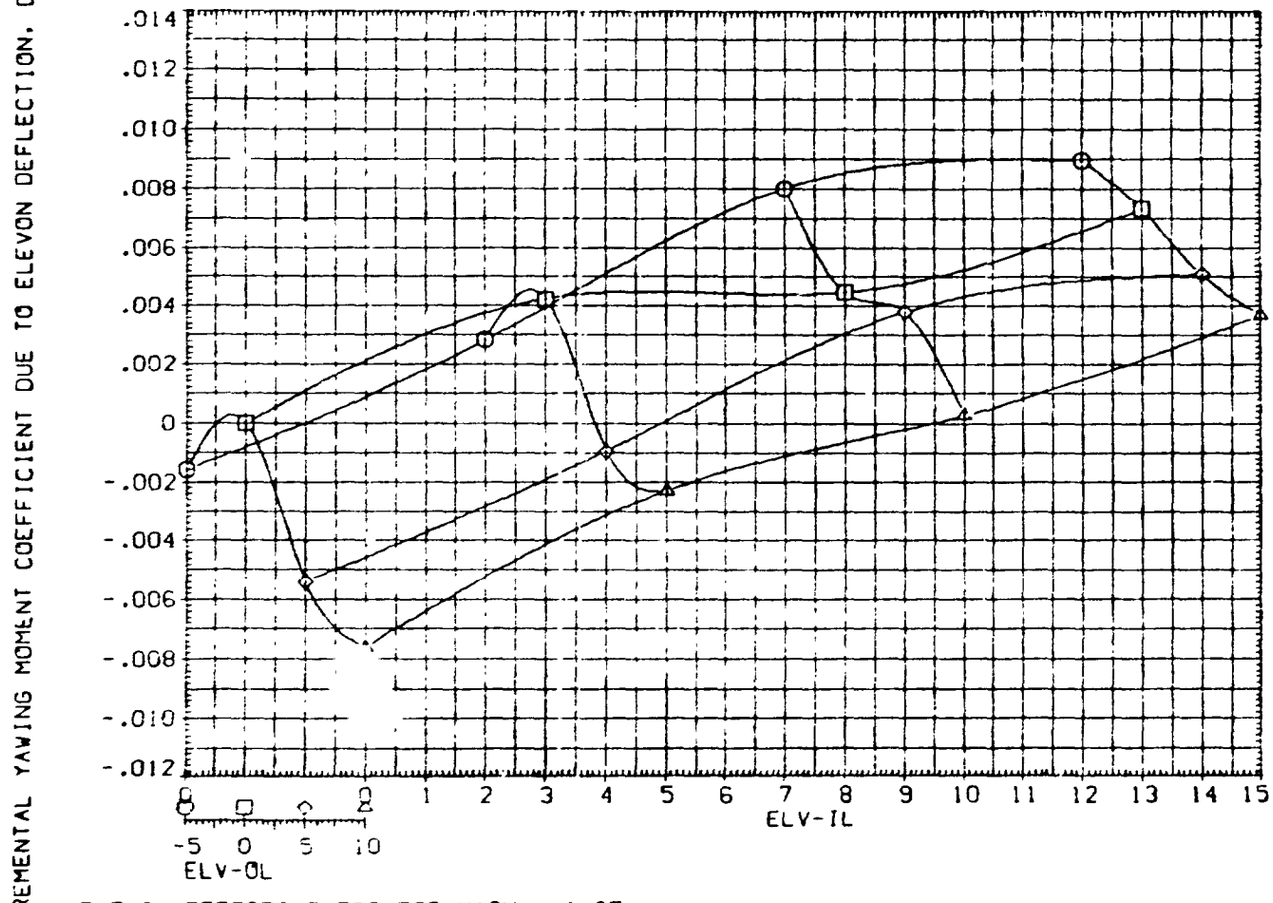
MSFC T#T 622 (IA125) 74 OTS, M=1.05, ALPHA= 2.0 (BINDSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

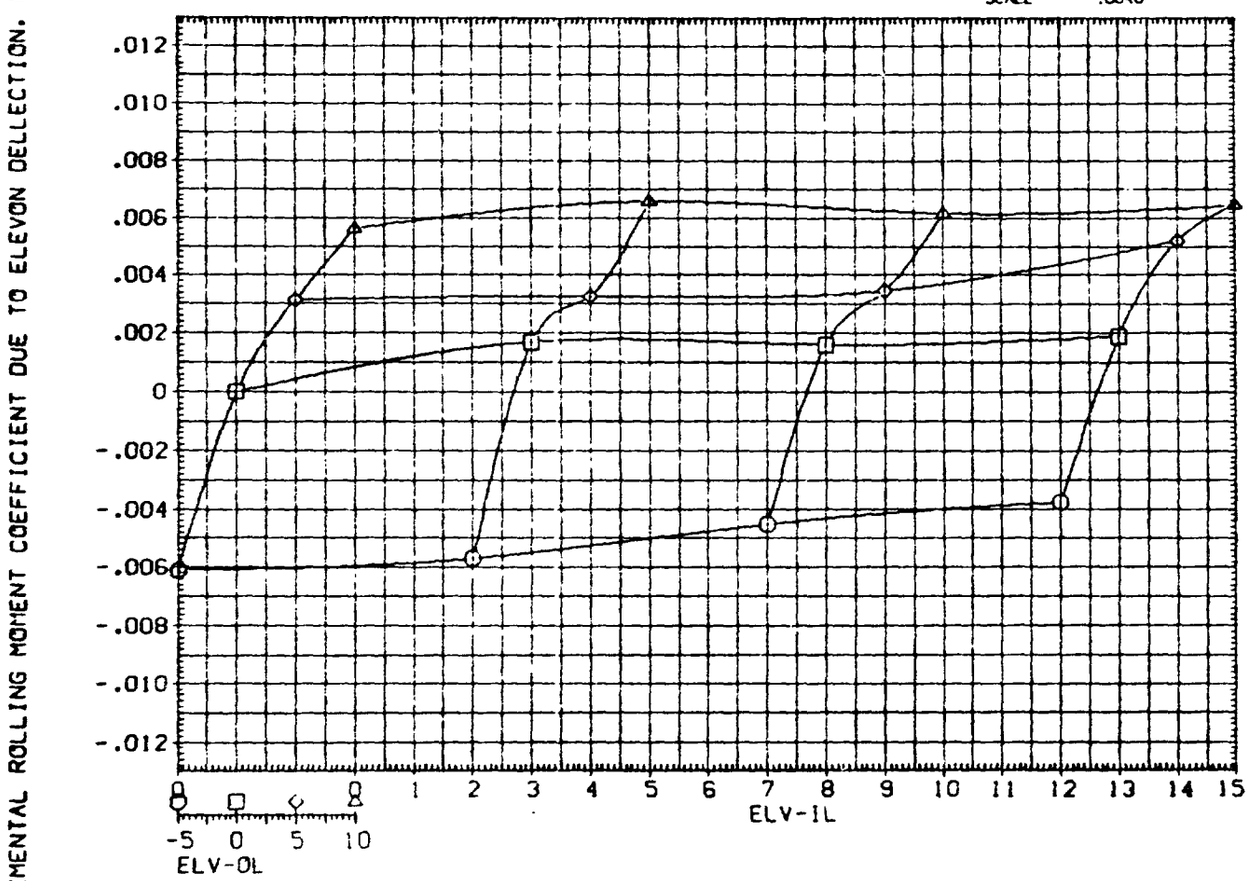
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 2.0 (BINDSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIV ESS FOR MACH = 1.05

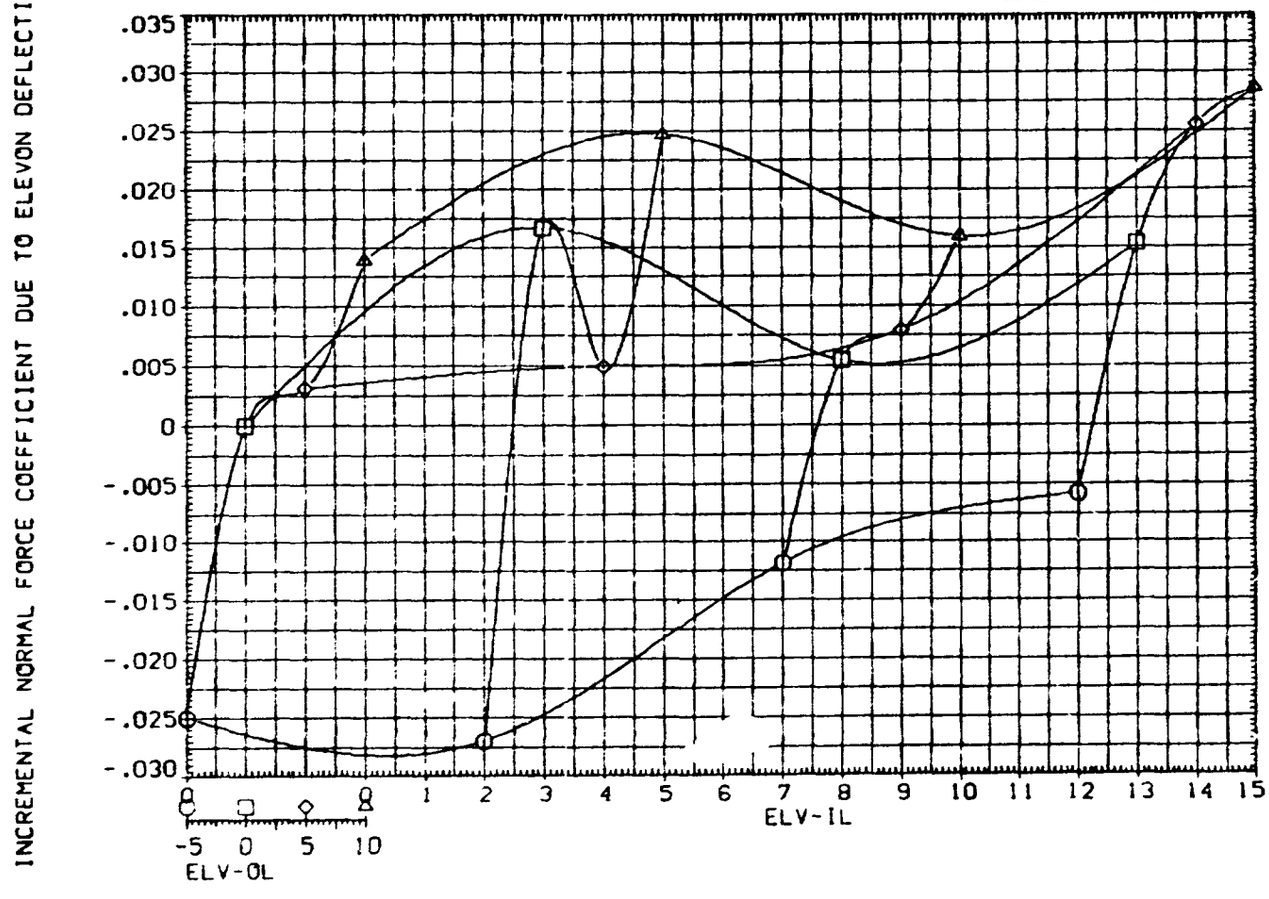
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 4.0 (BINDSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

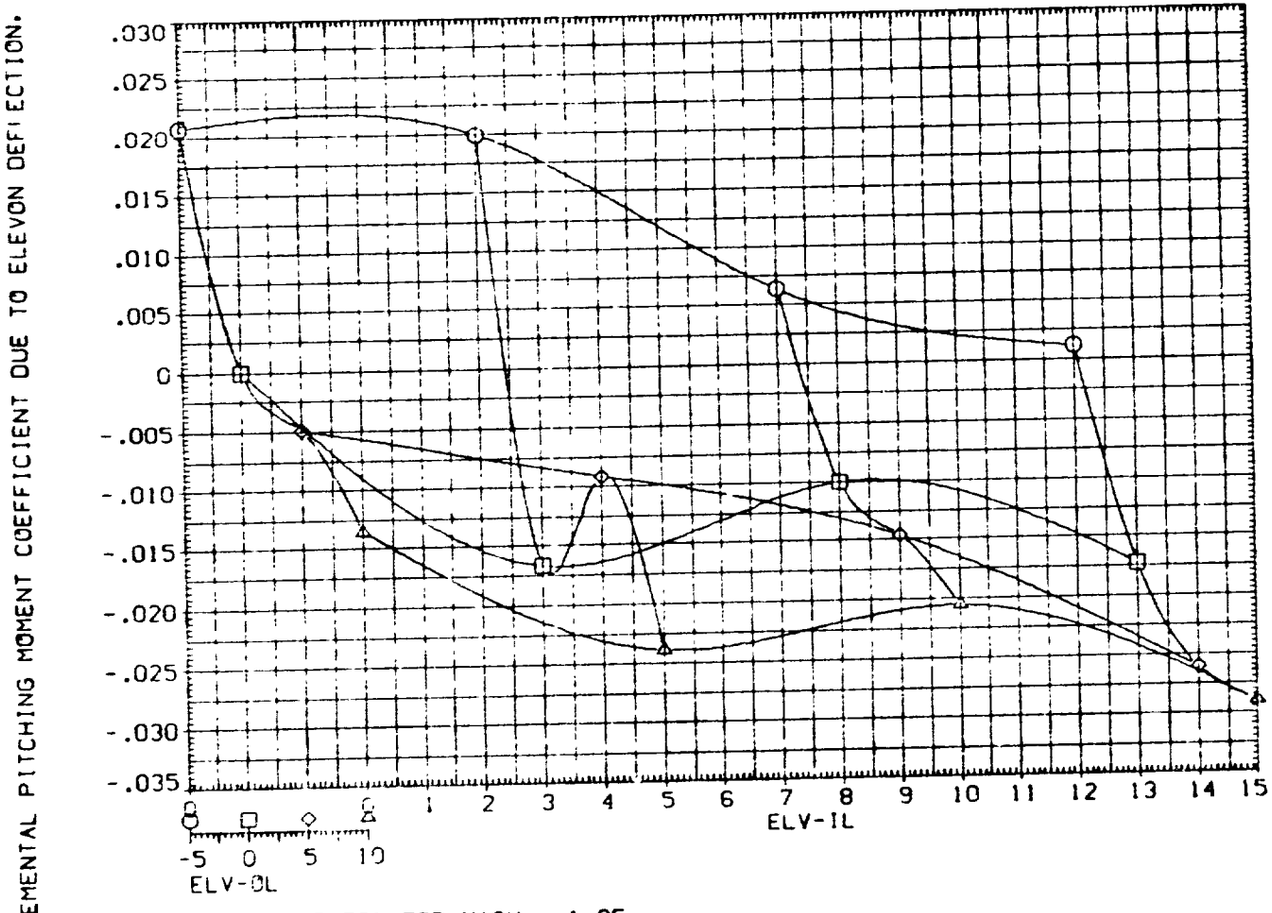
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 4.0 (BINDSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

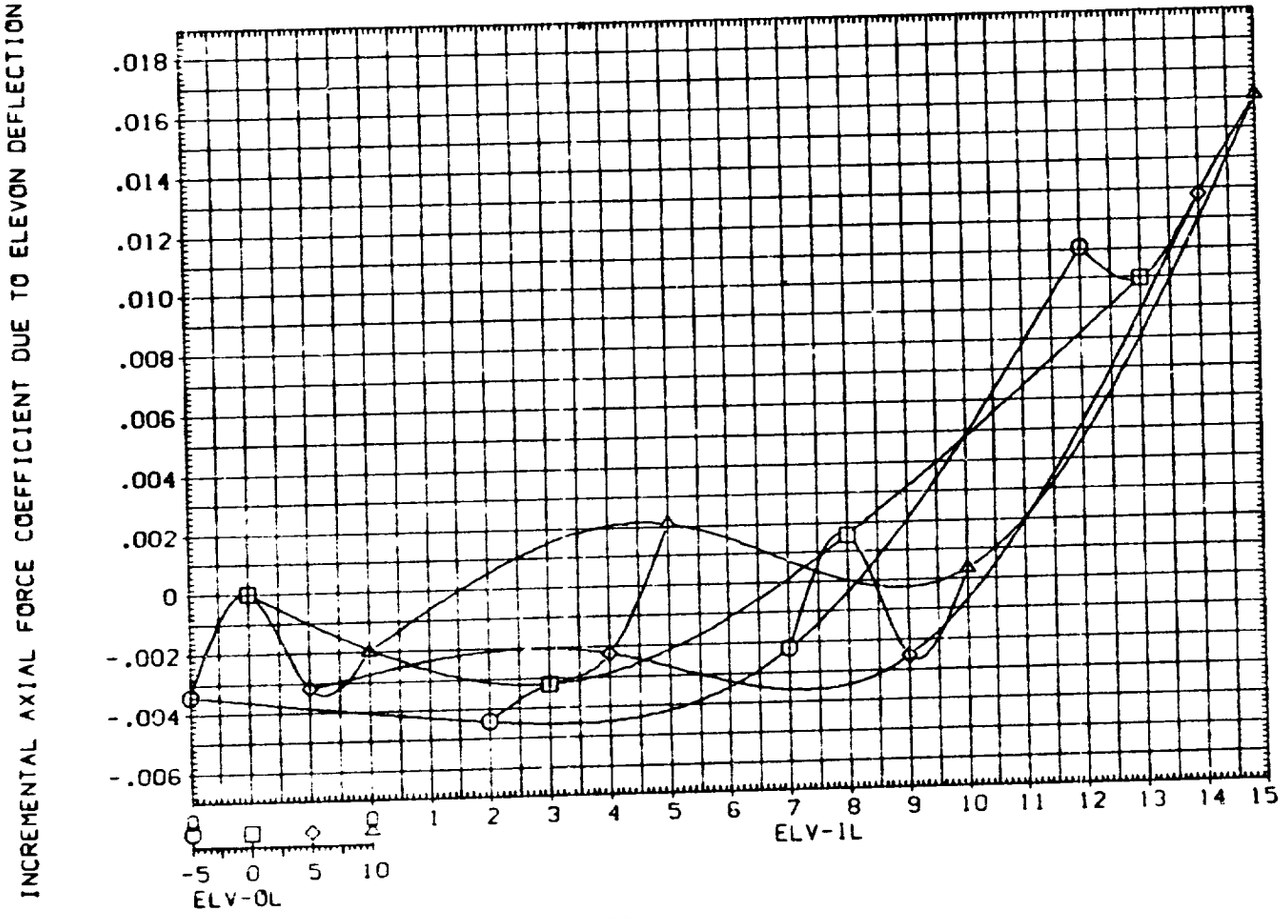
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA= 4.0 (BINOSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.050	ELV-IR	0.10
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

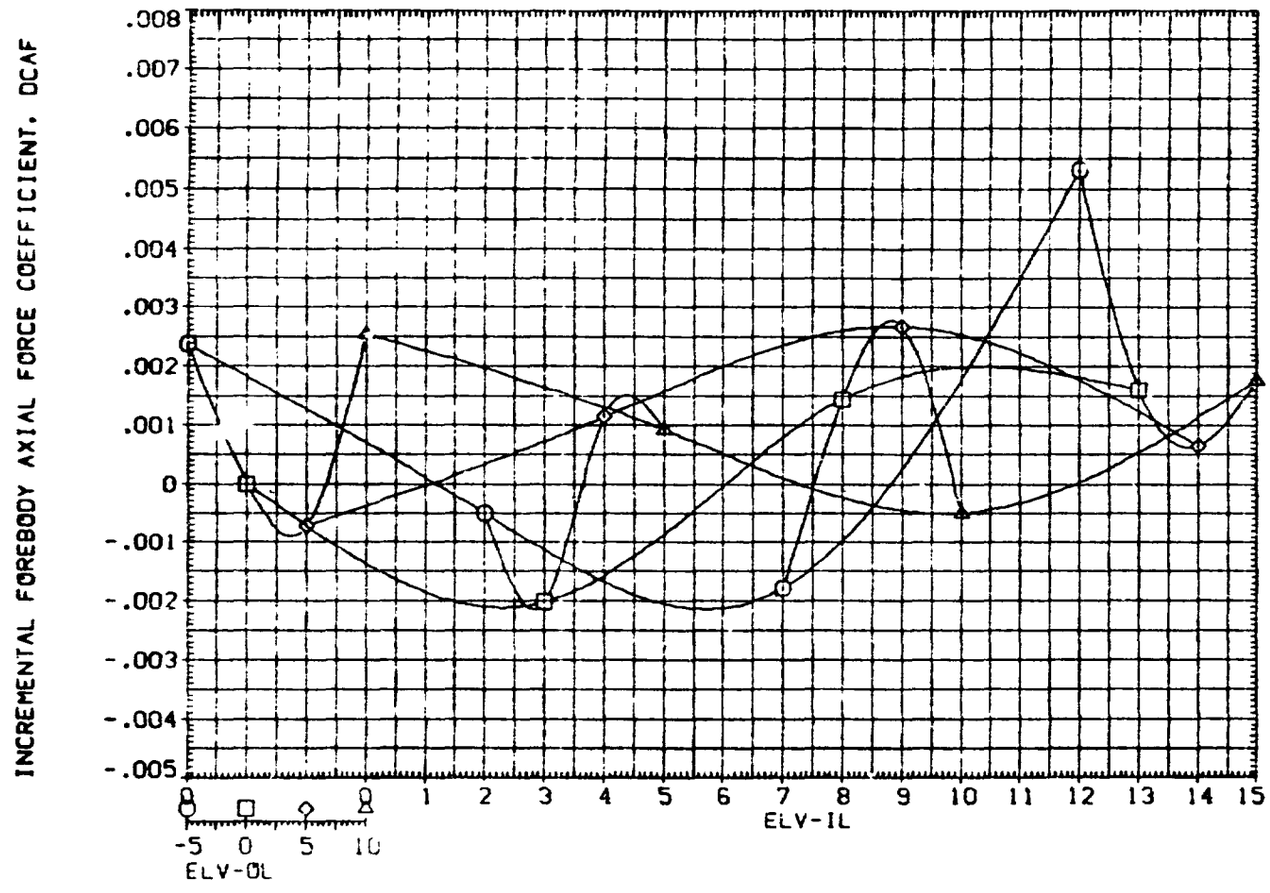
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA= 4.0 (BINDSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

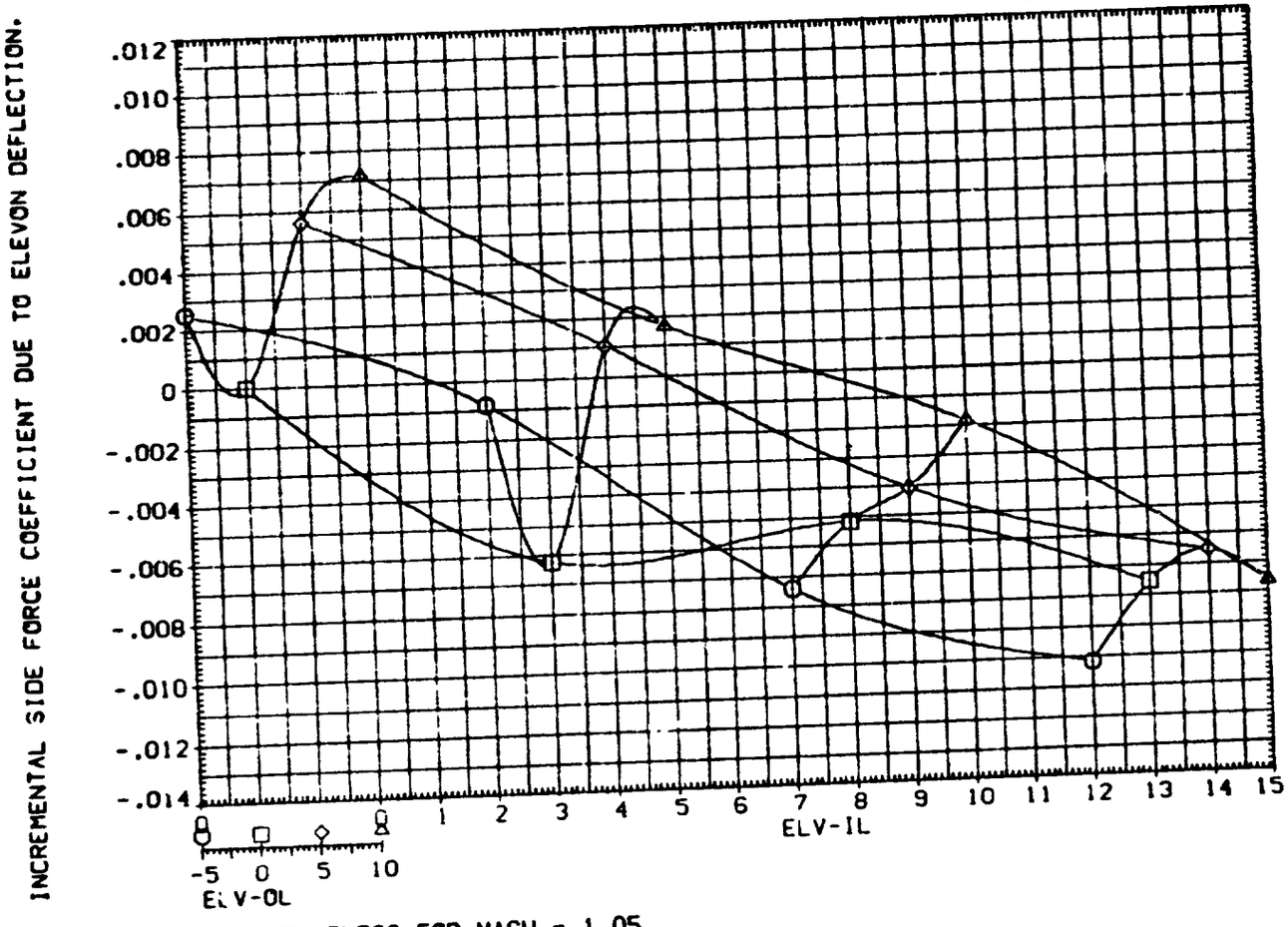
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 4.0 (BINDSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

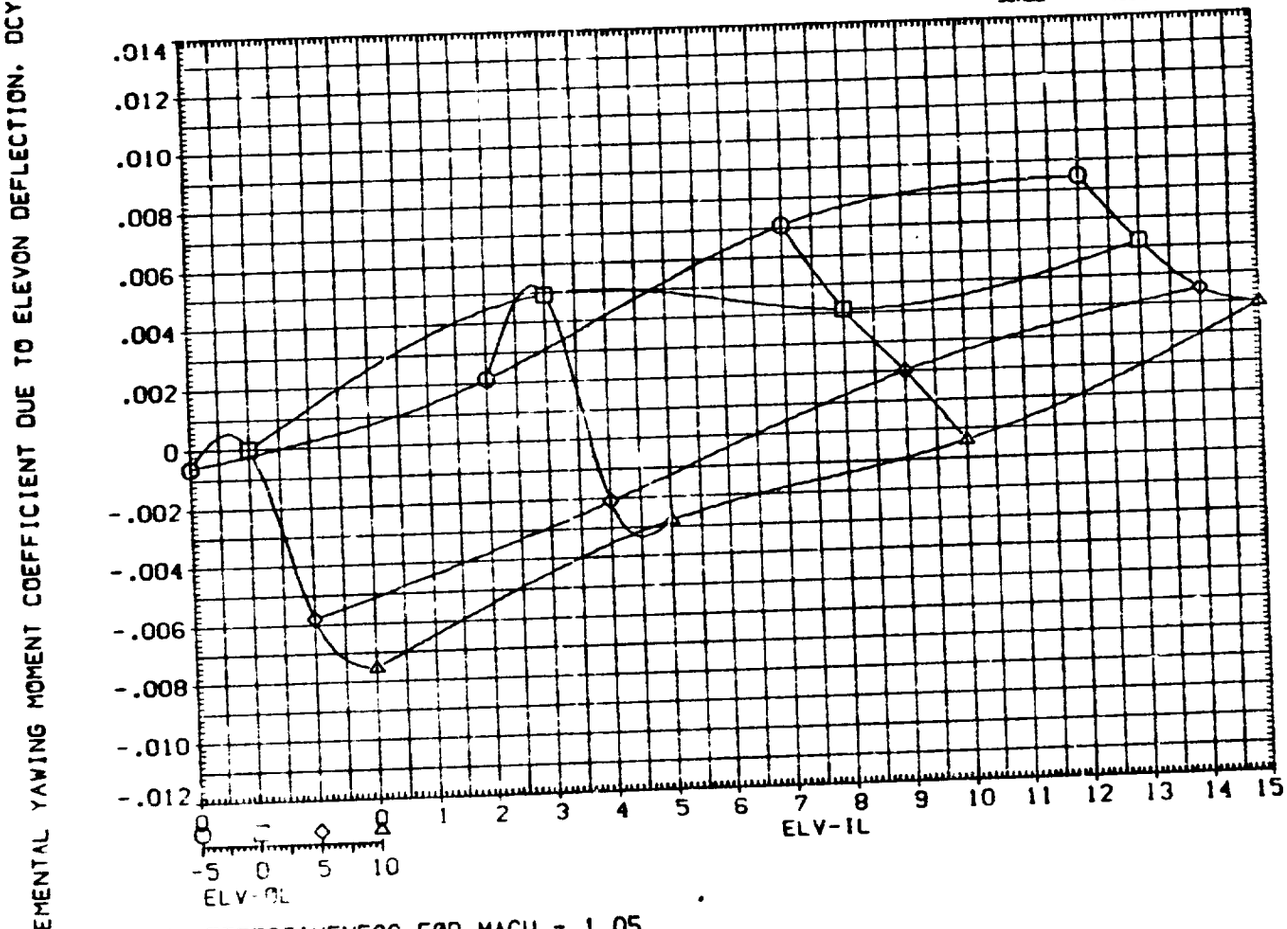
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA= 4.0 (BINDSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	376.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

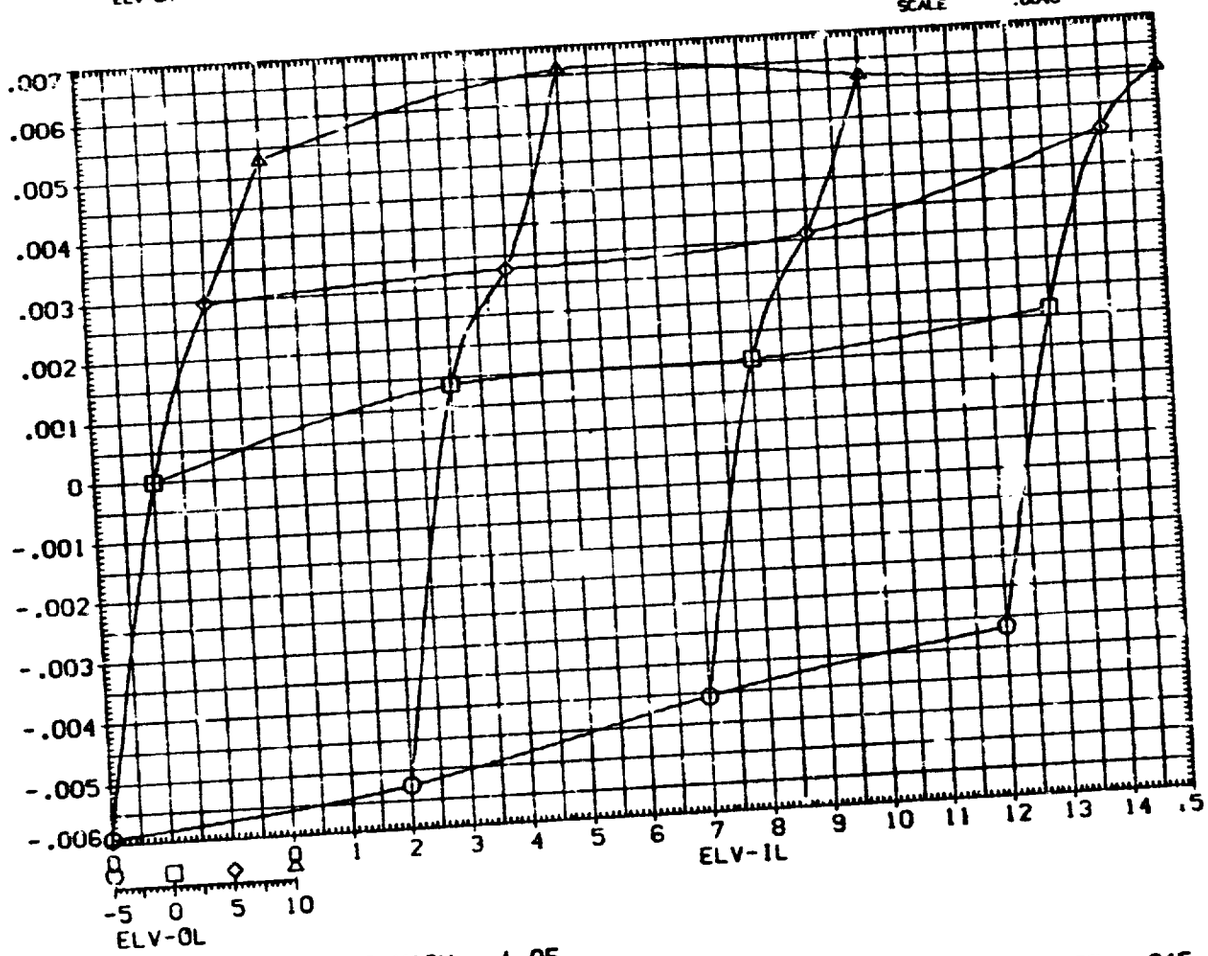
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA= 4.0 (BINDSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.050	ELV-IR	0.0
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

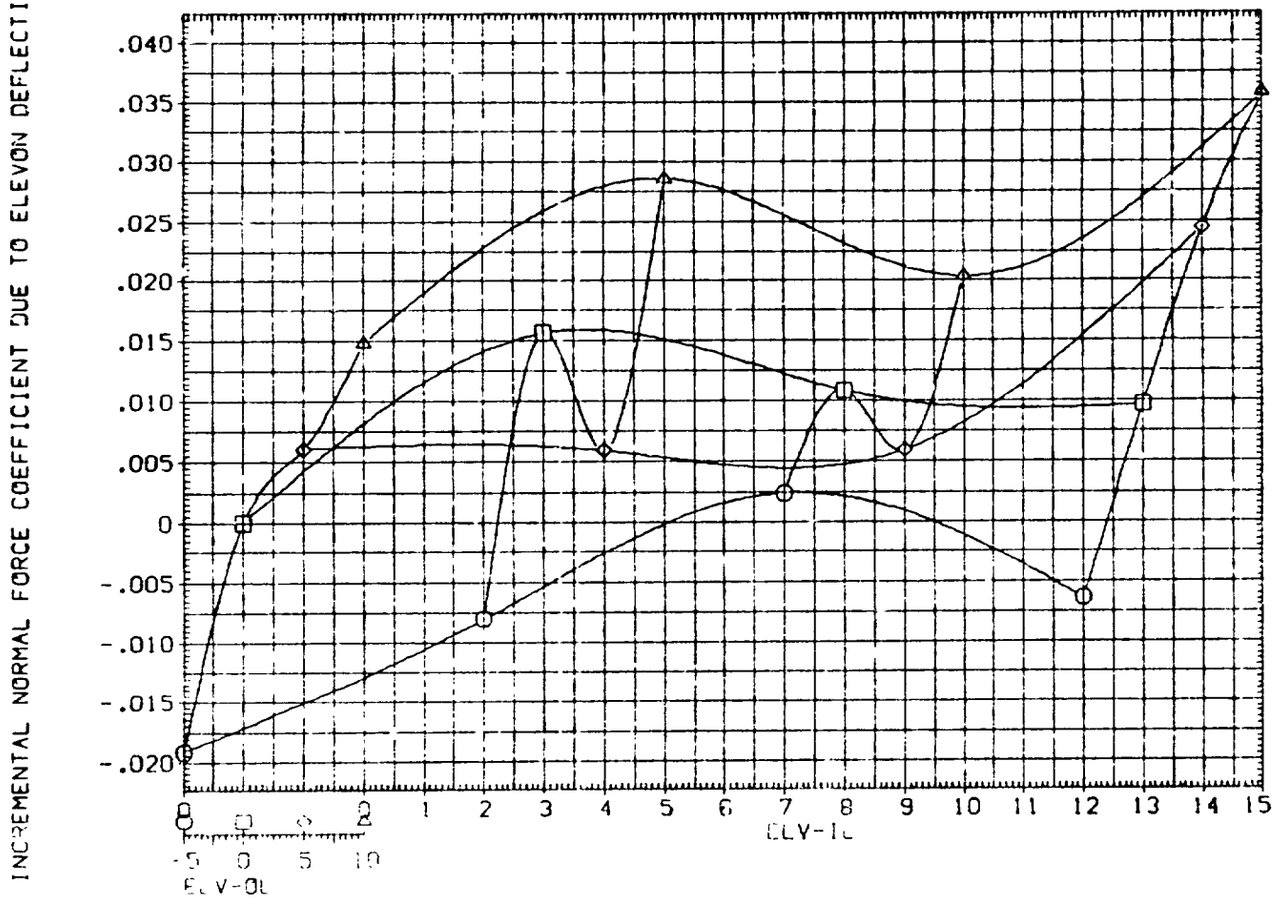
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA= 6.0 (BINDSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ON EFFECTIVENESS FOR MACH = 1.05

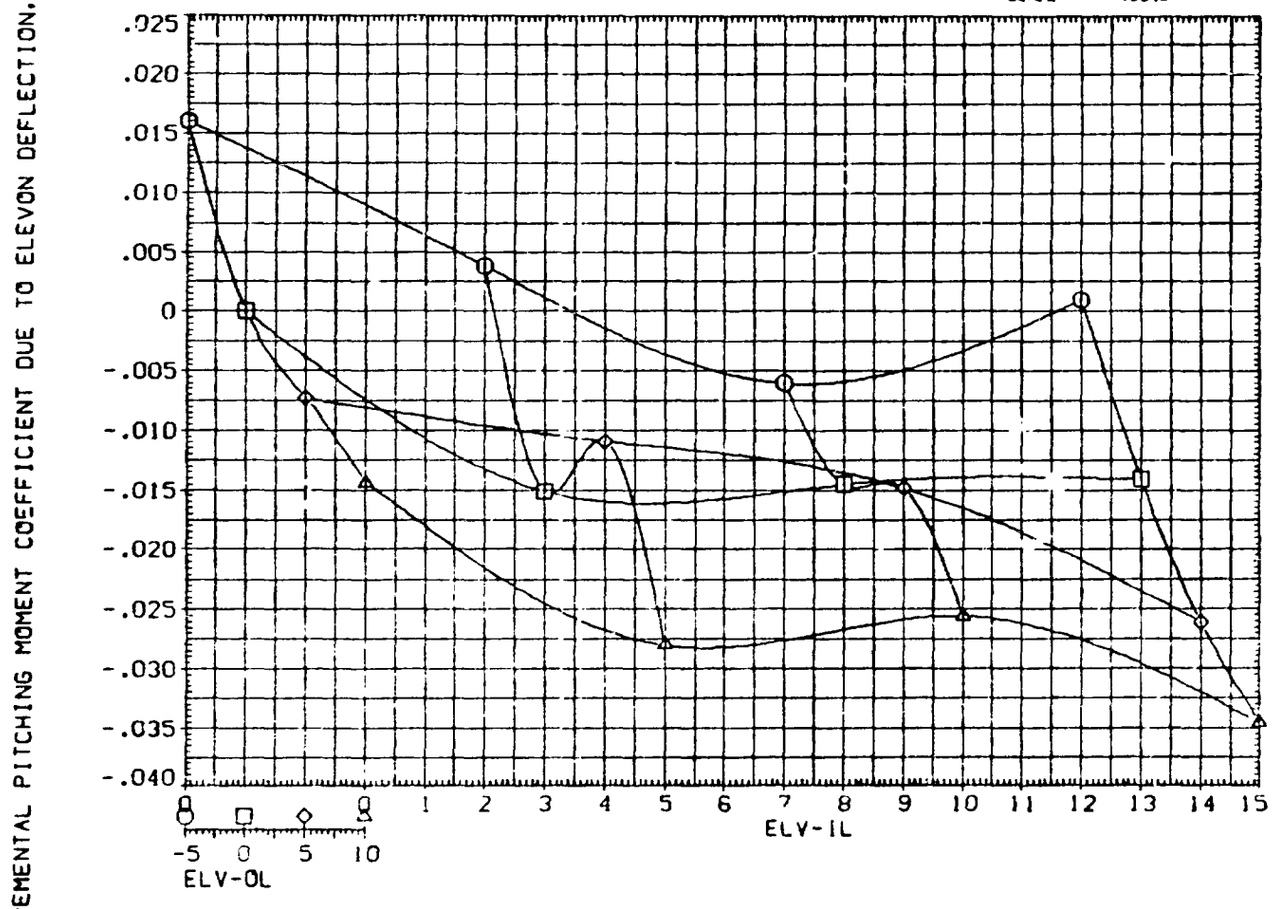
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 6.0 (BINDSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

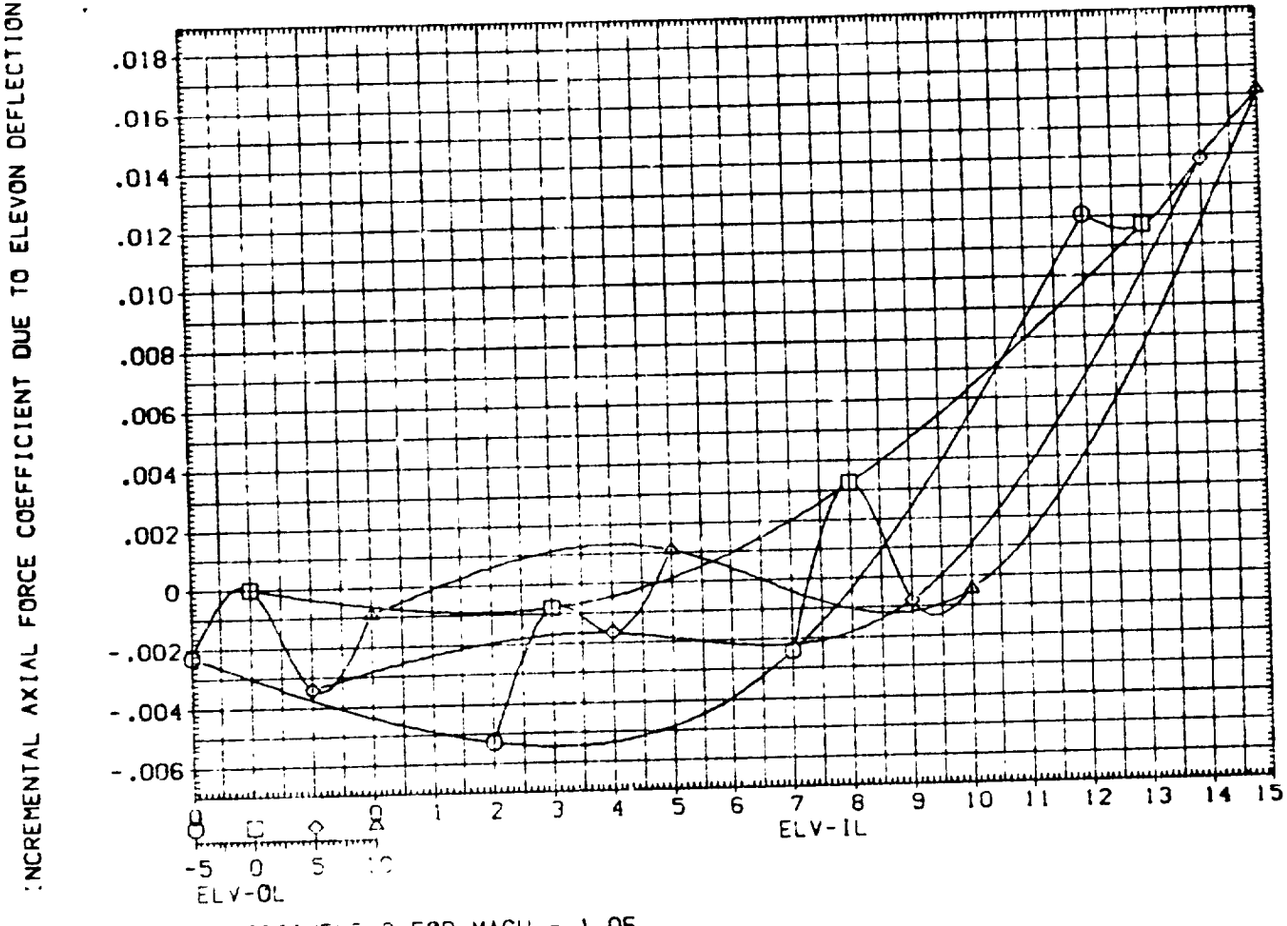
MSFC TWT 622 (IA125) 74 STS, M=1.05, ALPHA= 6.0 (BINDSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

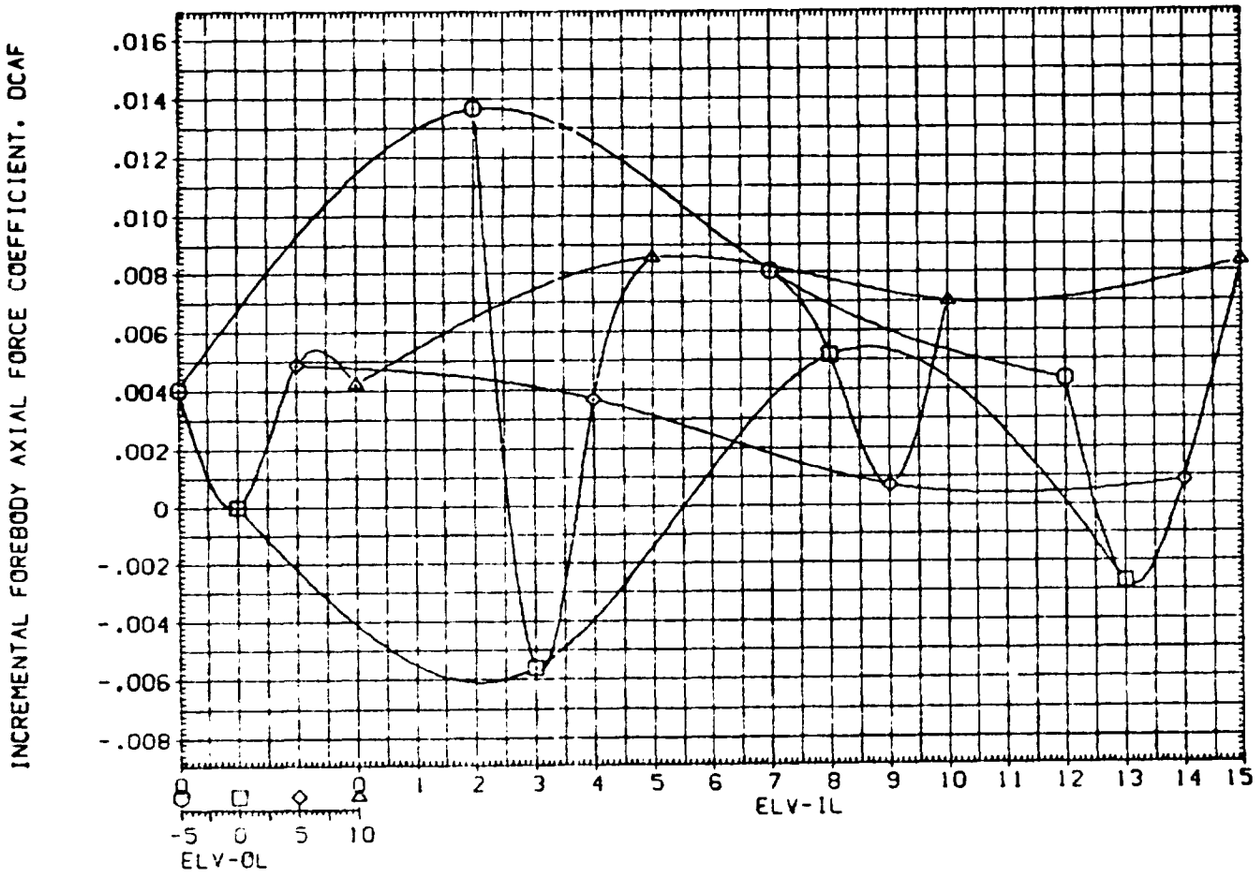
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 6.0 (BINDSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

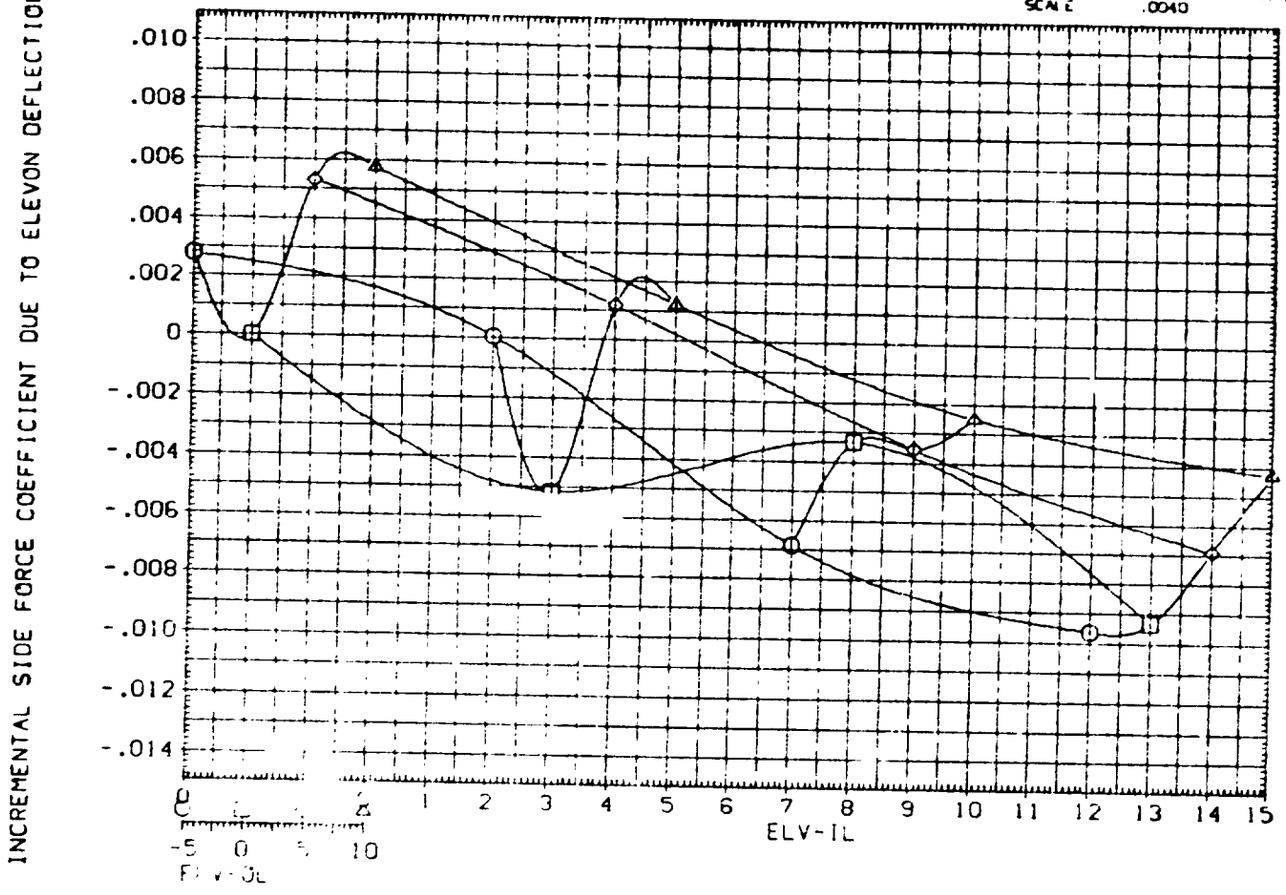
MSFC TWT 622 (IA125) 74 CTS. M=1.05. ALPHA= 6.0 (BINOSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

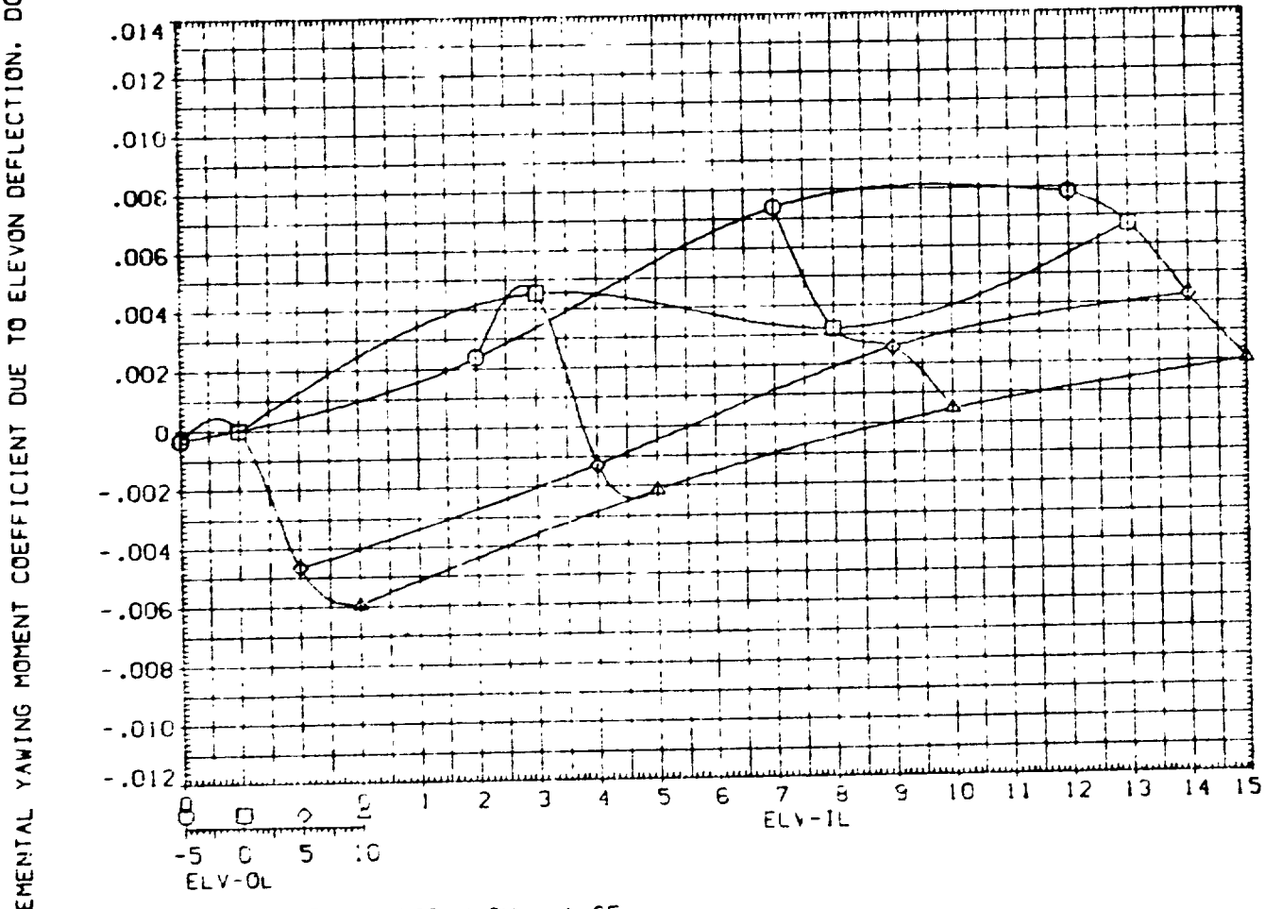
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 6.0 (BINDSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

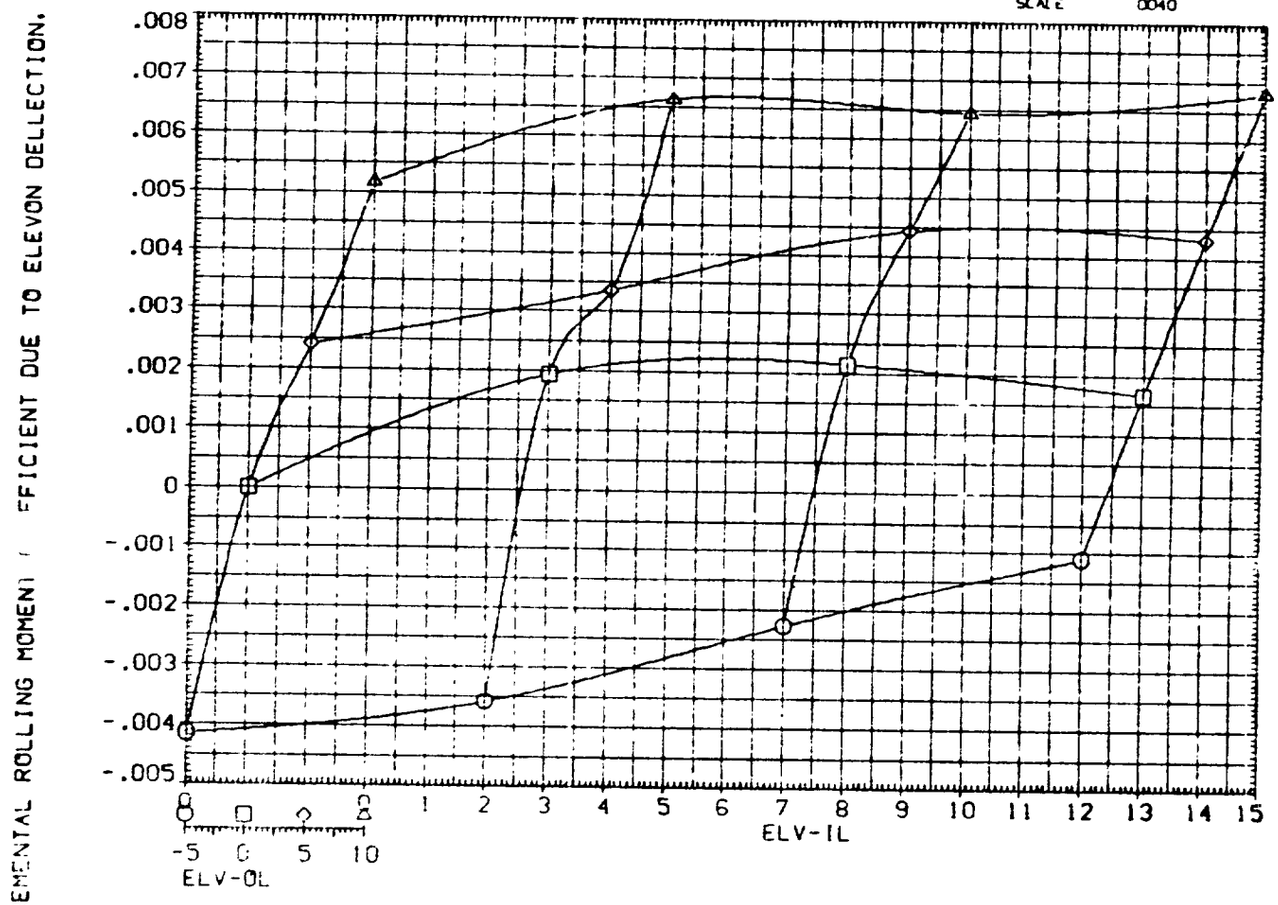
MSFC Test 622 (A125) F4 STS, M=1.05, ALPHA= 6.0 (BINDSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

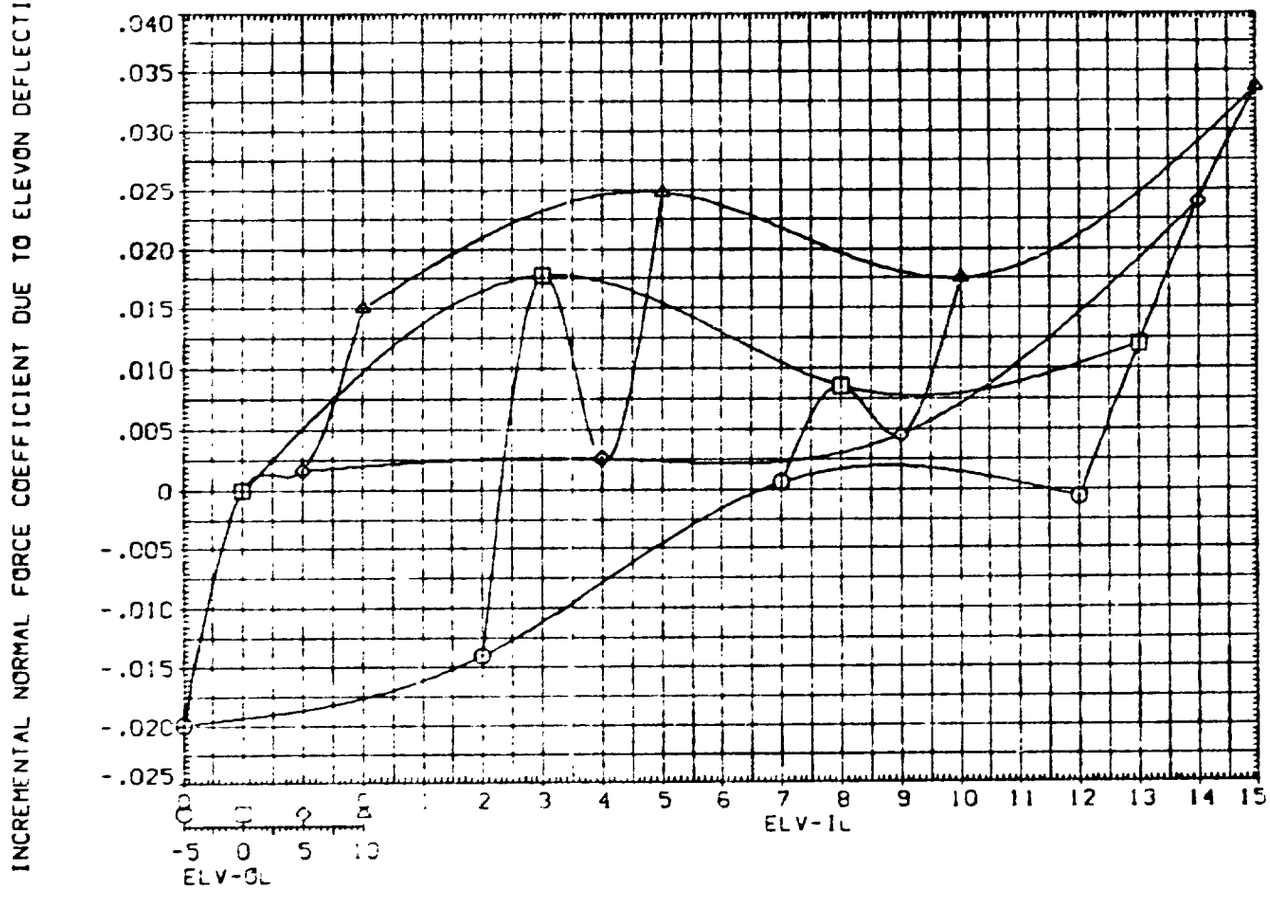
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 8.0 (B1NDSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

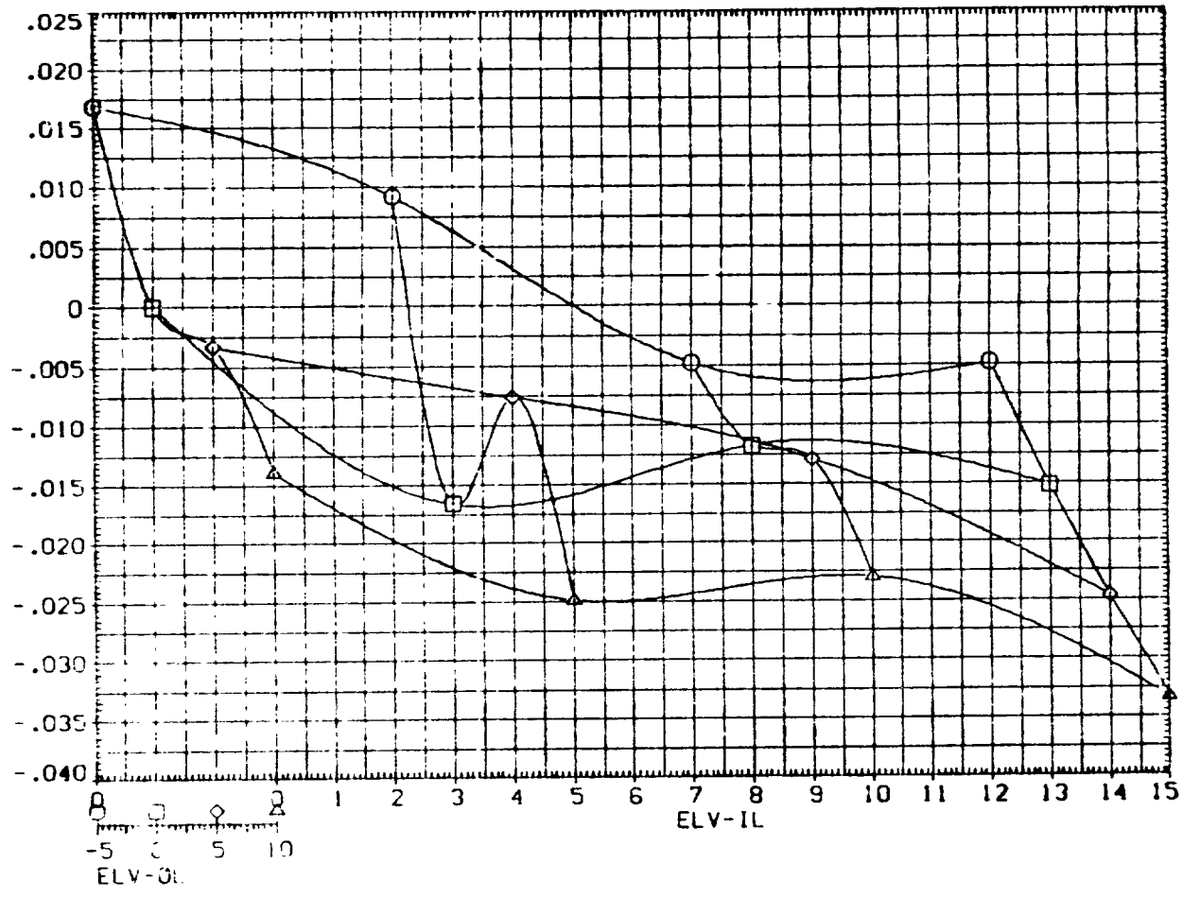
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 8.0 (BINDSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.050	ELV-IR	.100
ELV-OR	.000		

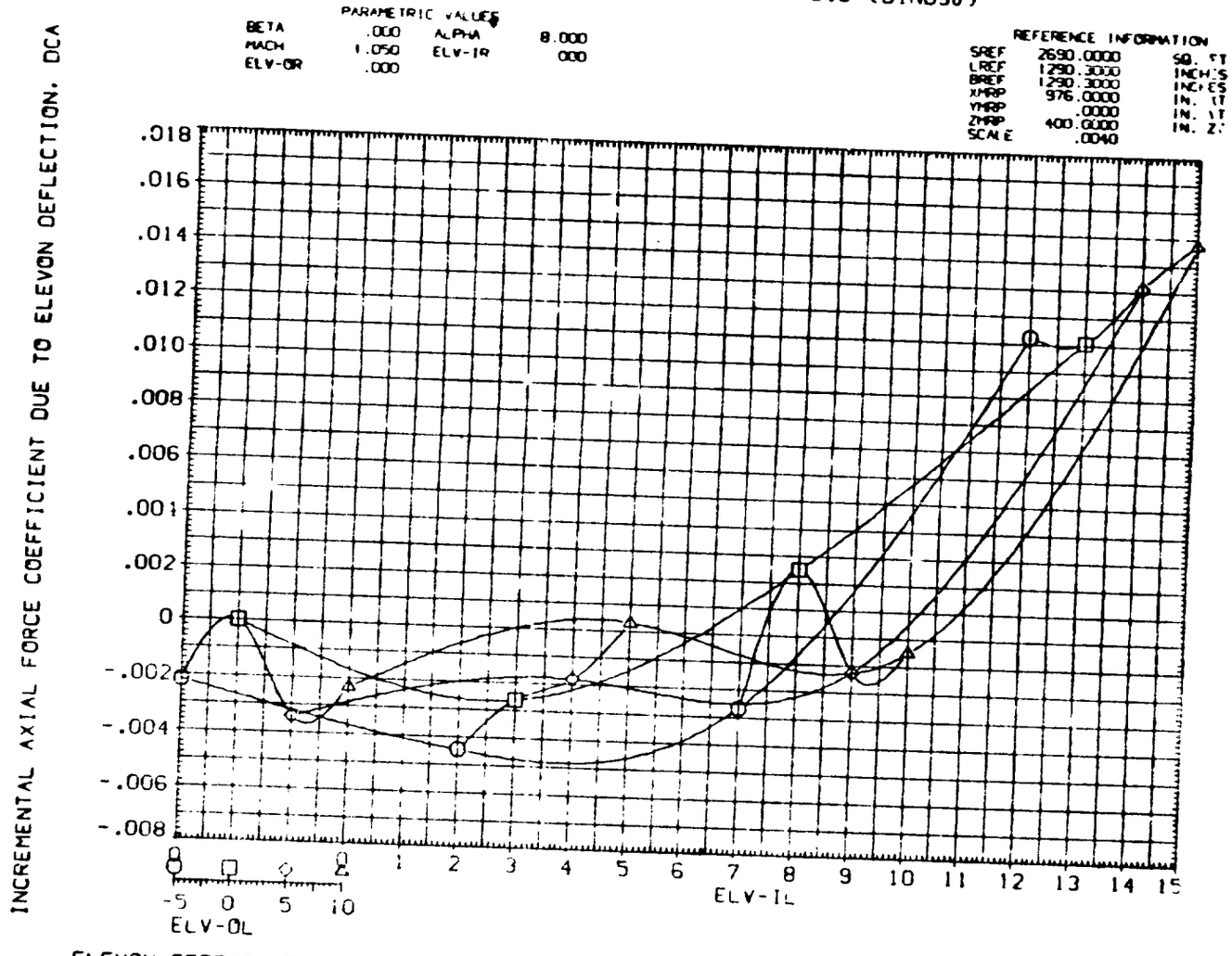
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

MSFC TWT 622 (!A!25) 74 OTS, M=1.05, ALPHA= 8.0 (BINOSJ)



ELEVON EFFECTIVENESS FOR MACH = 1.05

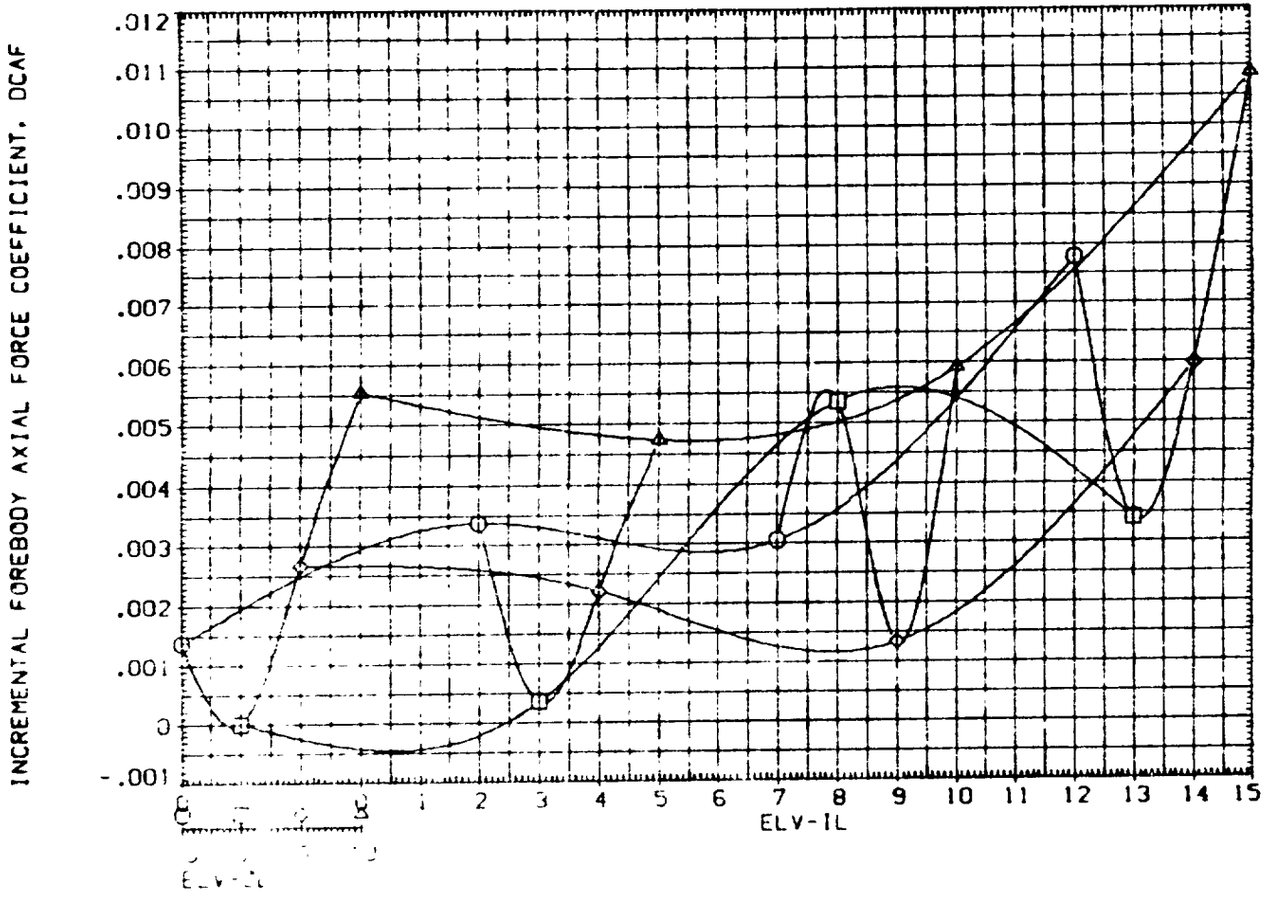
MSFC TWT 622 (A125, 74 STD, M=1.05, ALPHA= 8.0 (BINDSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.050	ELV-IR	.000
ELV-OP	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN XT
YMRP	.0000	IN YT
ZMRP	400.0000	IN ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

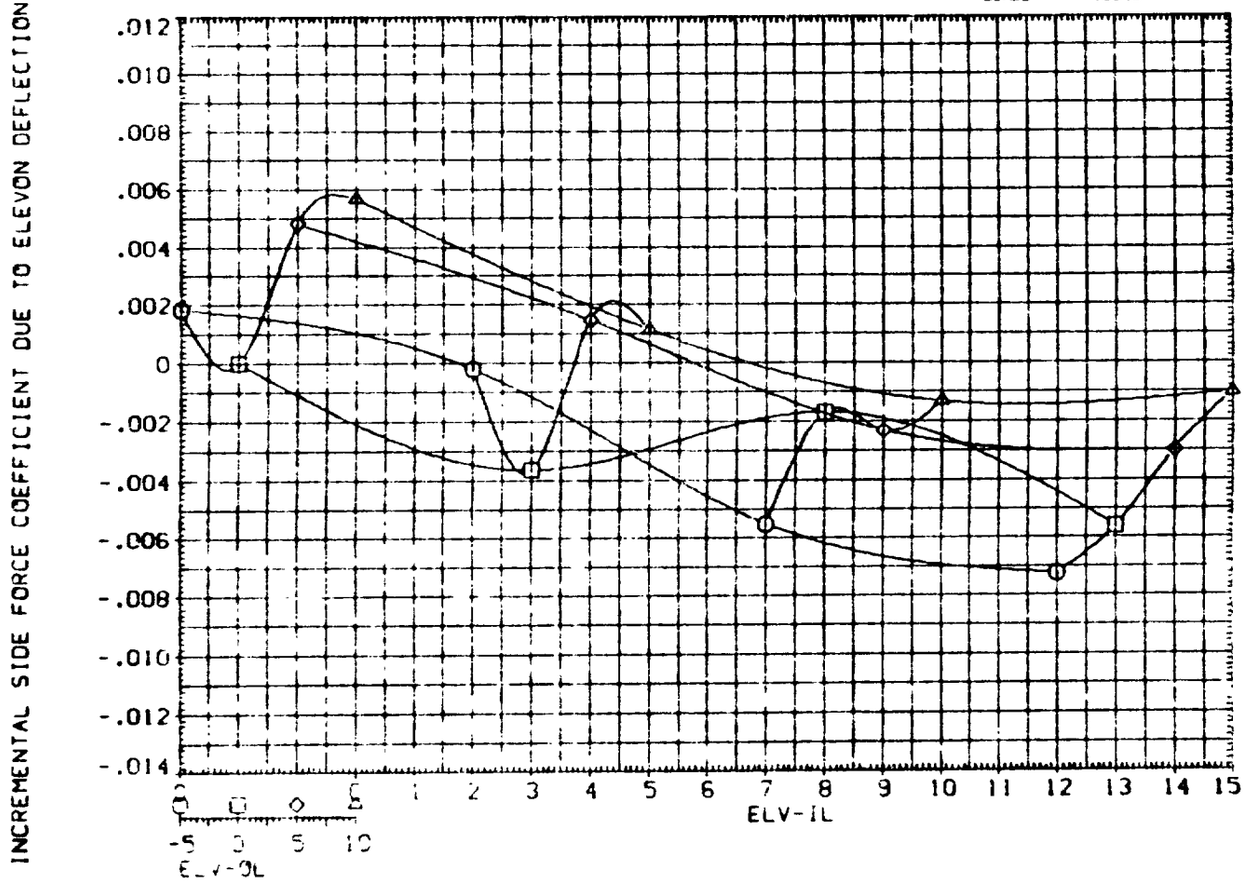
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 8.0 (BINDSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

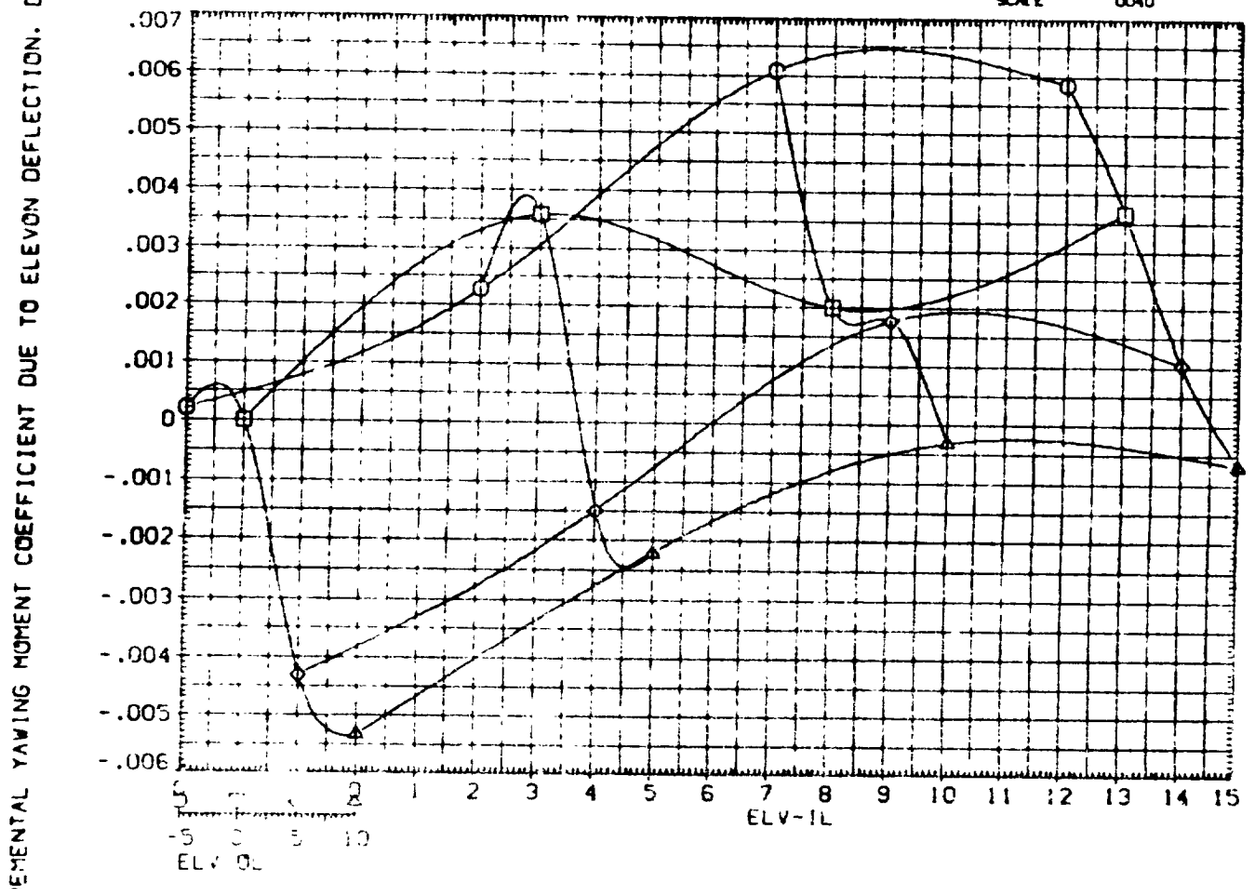
MSFC [illegible] (AIESJ) 74 PTS, M=1.05, ALPHA= 8.0 (BINOSJ)

PARAMETRIC VALUES

[illegible]	[illegible]	ALPHA	8.000
MACH	1.050	[illegible]	[illegible]
[illegible]	[illegible]		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

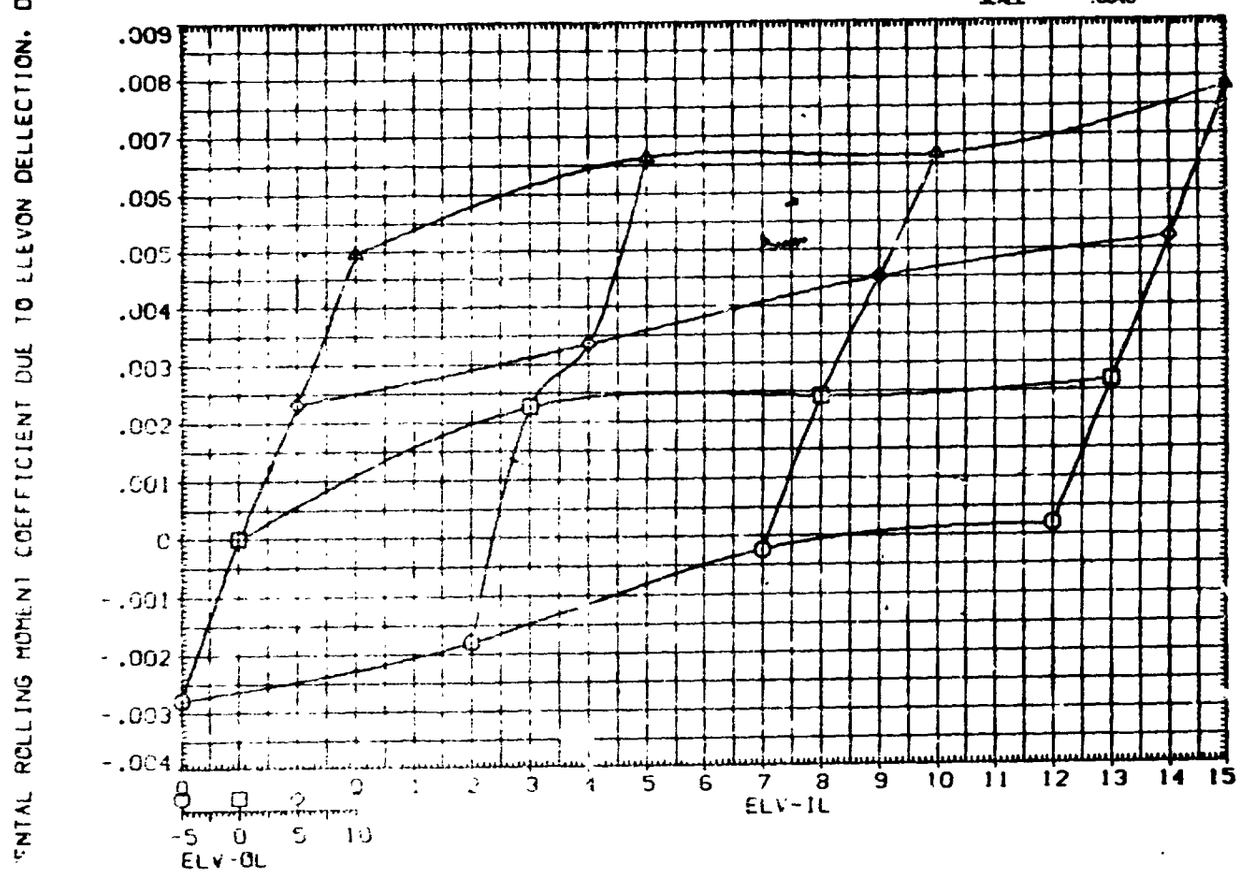
MSFC TWT 622 (IA:25) 74 OTS. M=1.05. ALPHA= 8.0 (BINDSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2890.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XY
YMRP	.0000	IN. YY
ZMRP	400.0000	IN. ZY
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

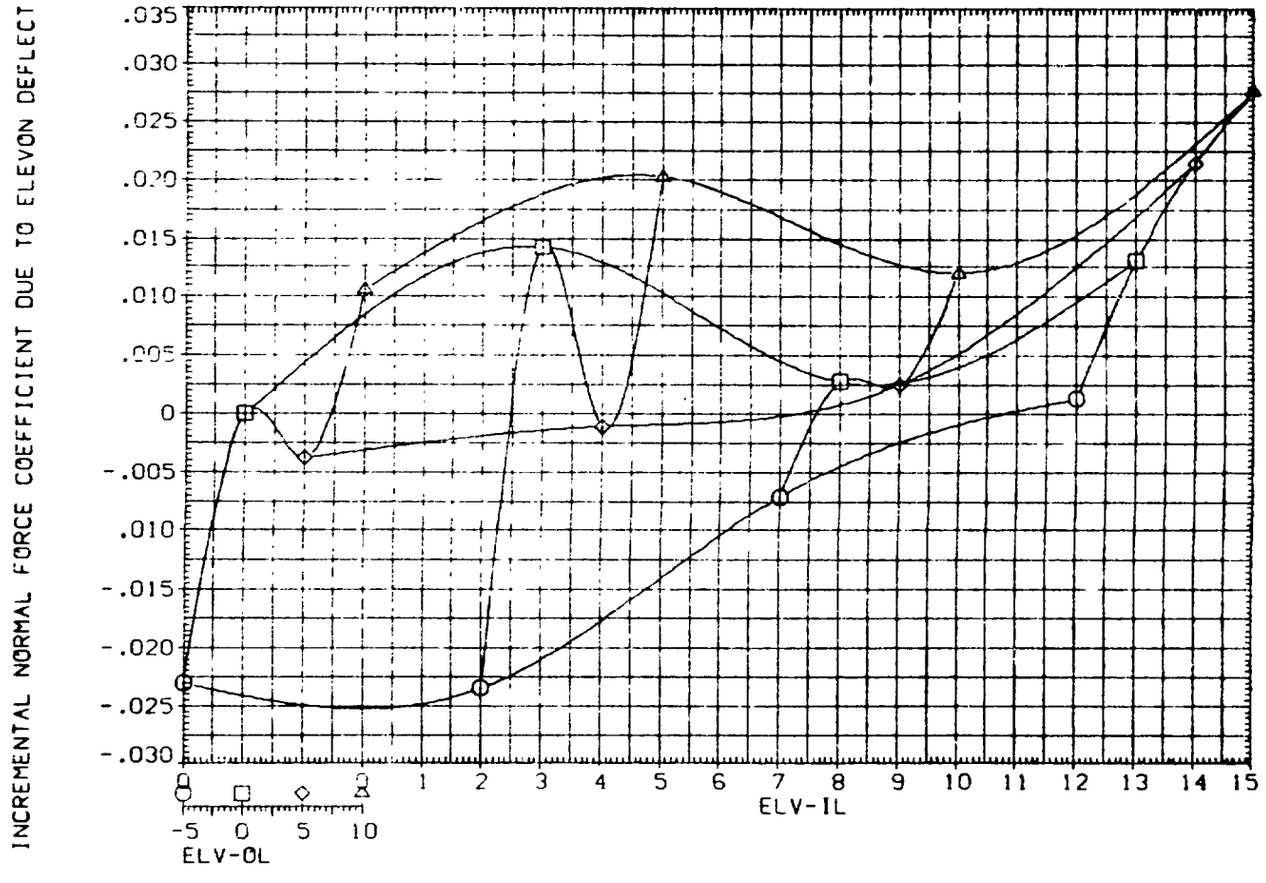
MSFC TWT 622 (IA125) 74 OTS. M=1.05, ALPHA= 10.0(BINDSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.050	ELV-IP	.000
ELV-OP	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

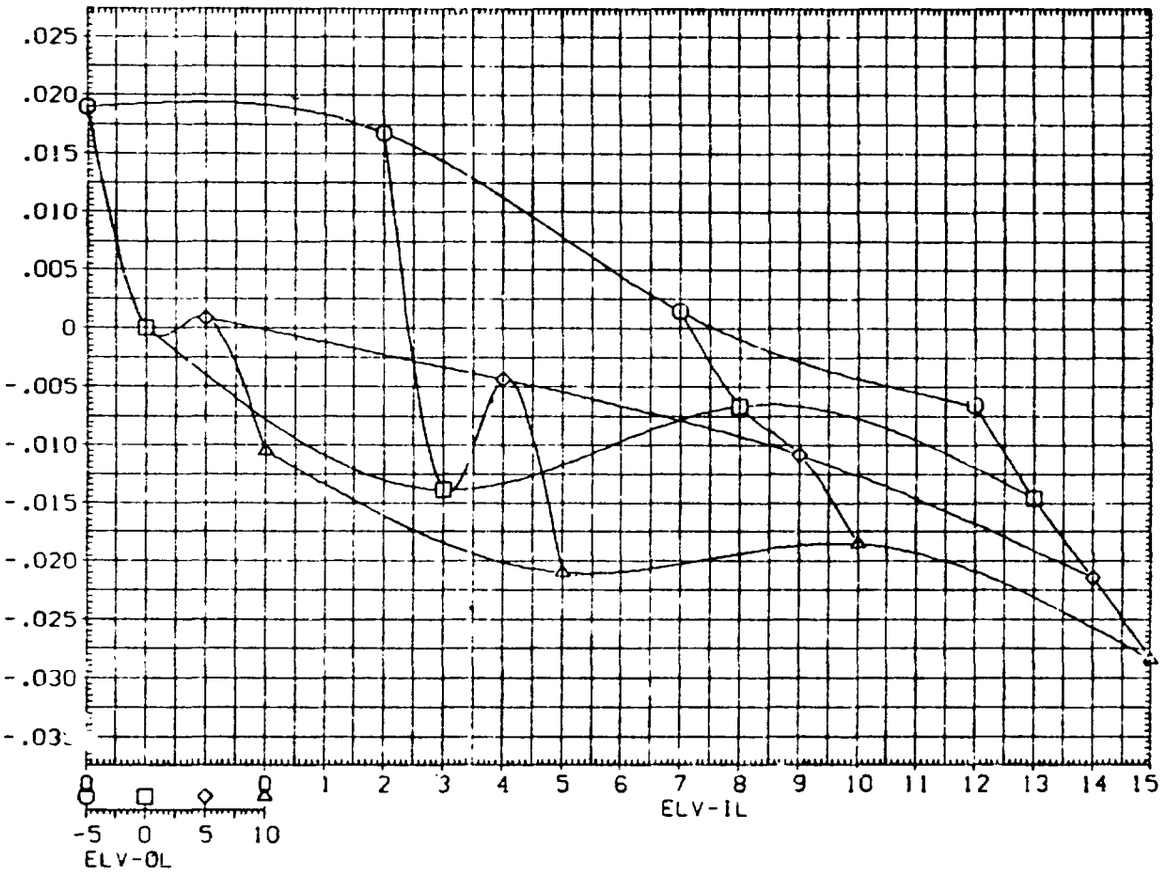
MSFC TWT 622 (1A125) 74 OTS, M=1.05, ALPHA= 10.0(BINDSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.100
MACH	1.050	ELV-1R	.100
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

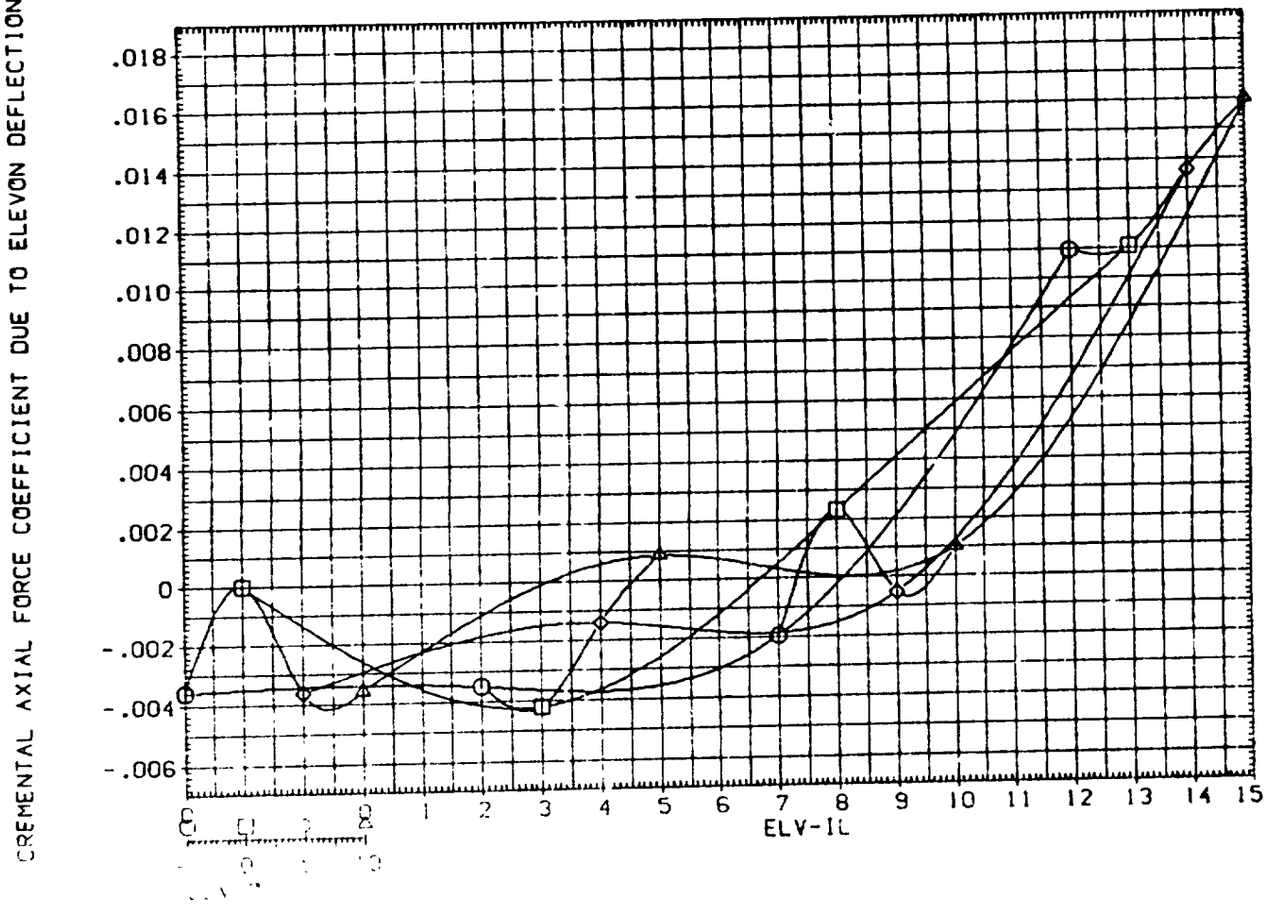
MSFC TWT 622 (IA125) 74 OTS. M=1.05. ALPHA= 10.0(BINDSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELE[illegible] FOR MACH = 1.05

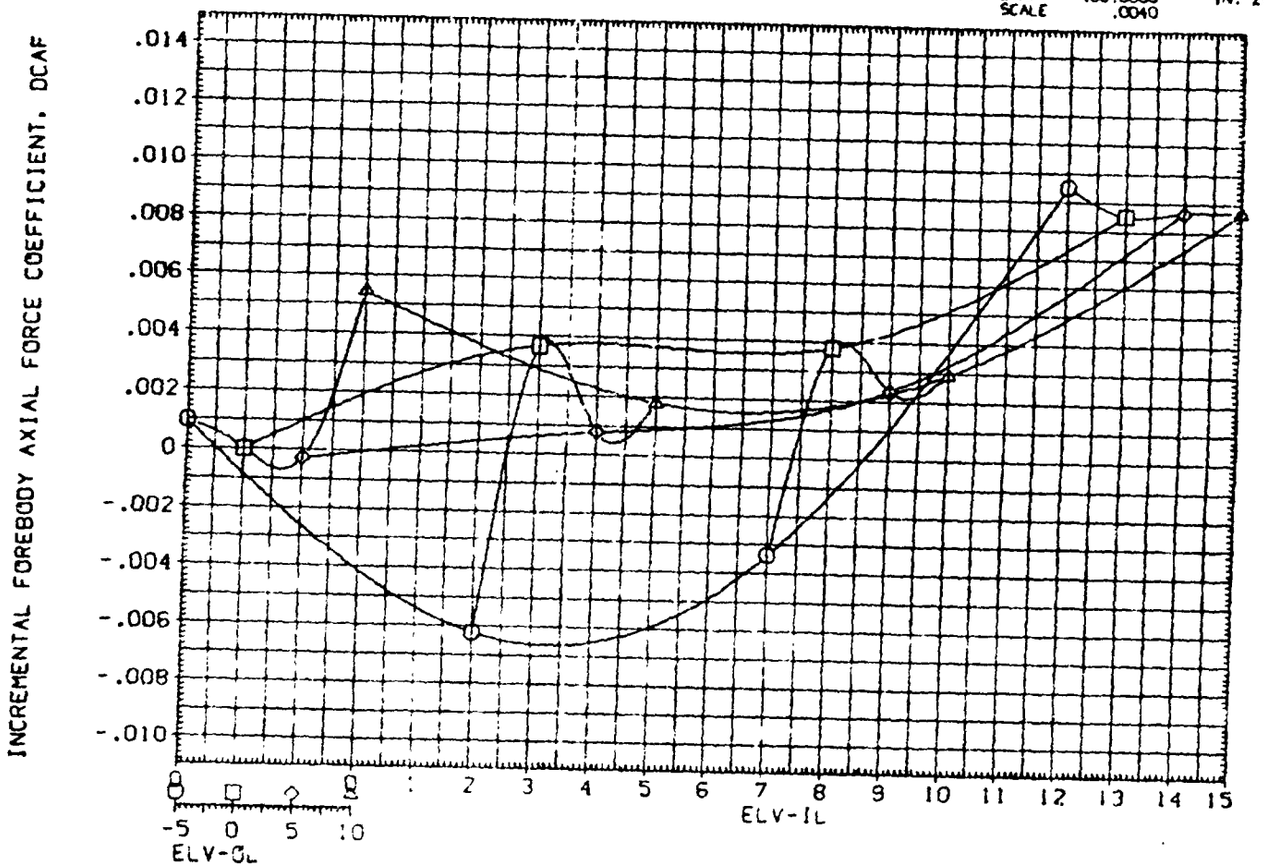
MSFC TWT 622 (1A125) 74 OTS. M=1.05, ALPHA= 10.0(BINDSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.050	ELV-IR	.000
ELV-OP	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

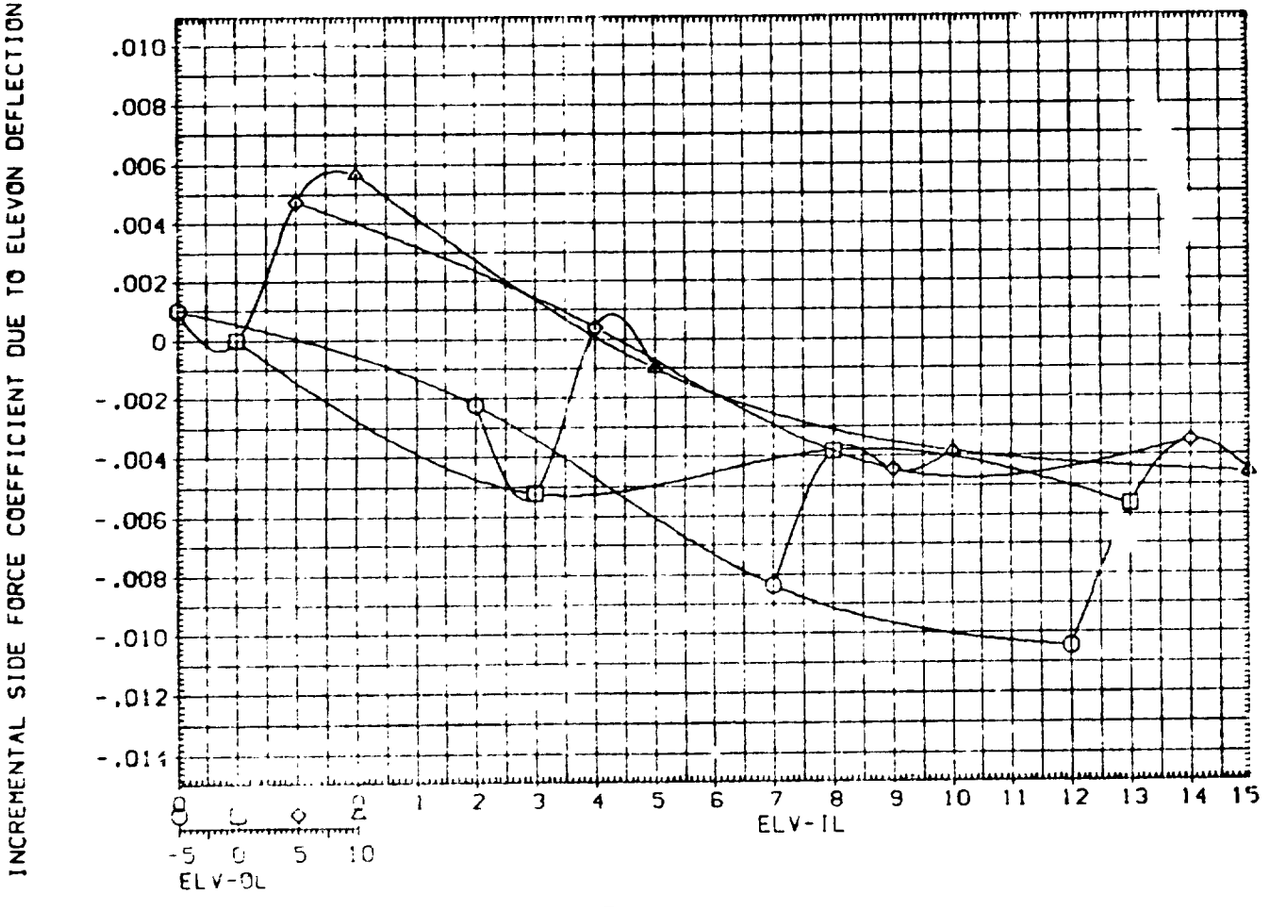
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 10.0(BINDSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

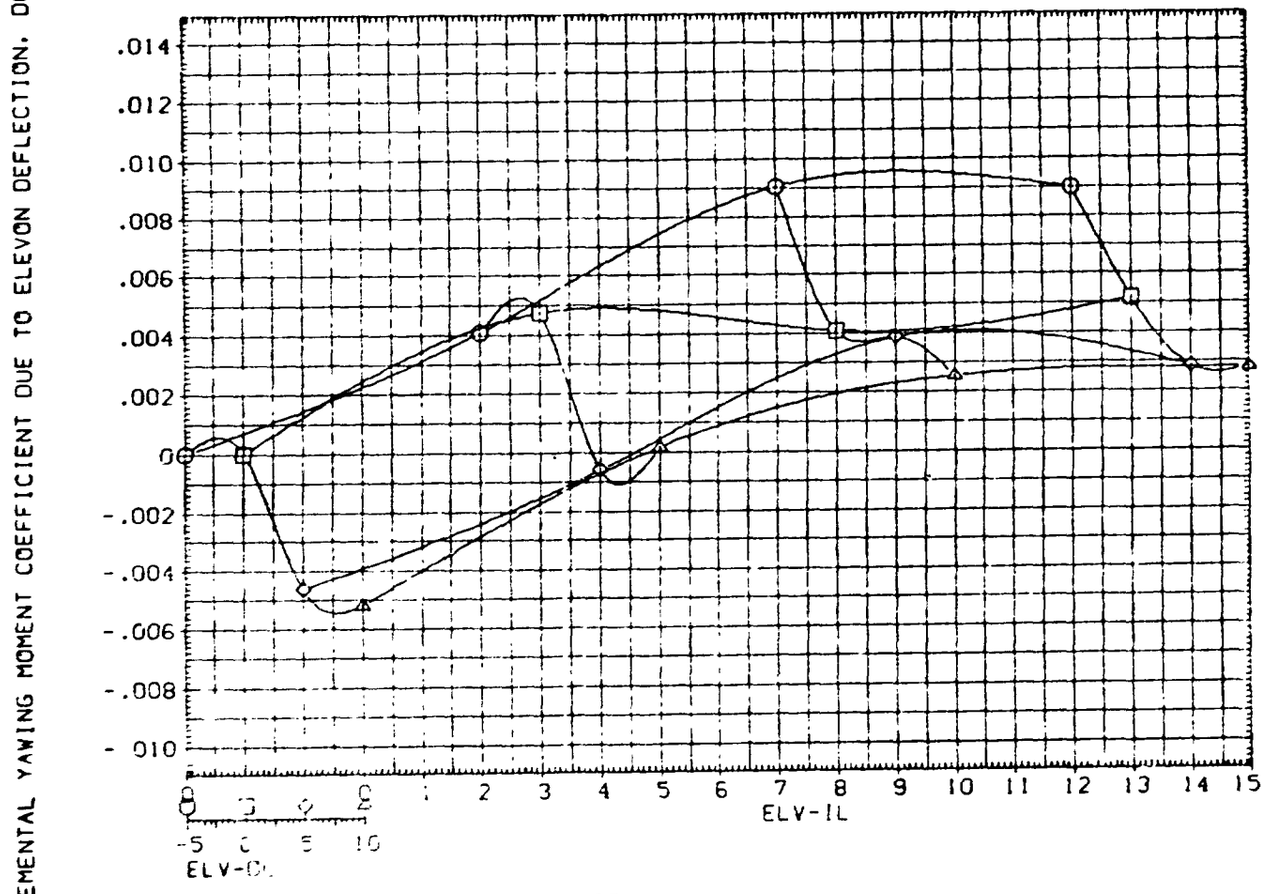
MSFC TWT 622 (IA125) 74 OTS, M=1.05, ALPHA= 10.0(BINOSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

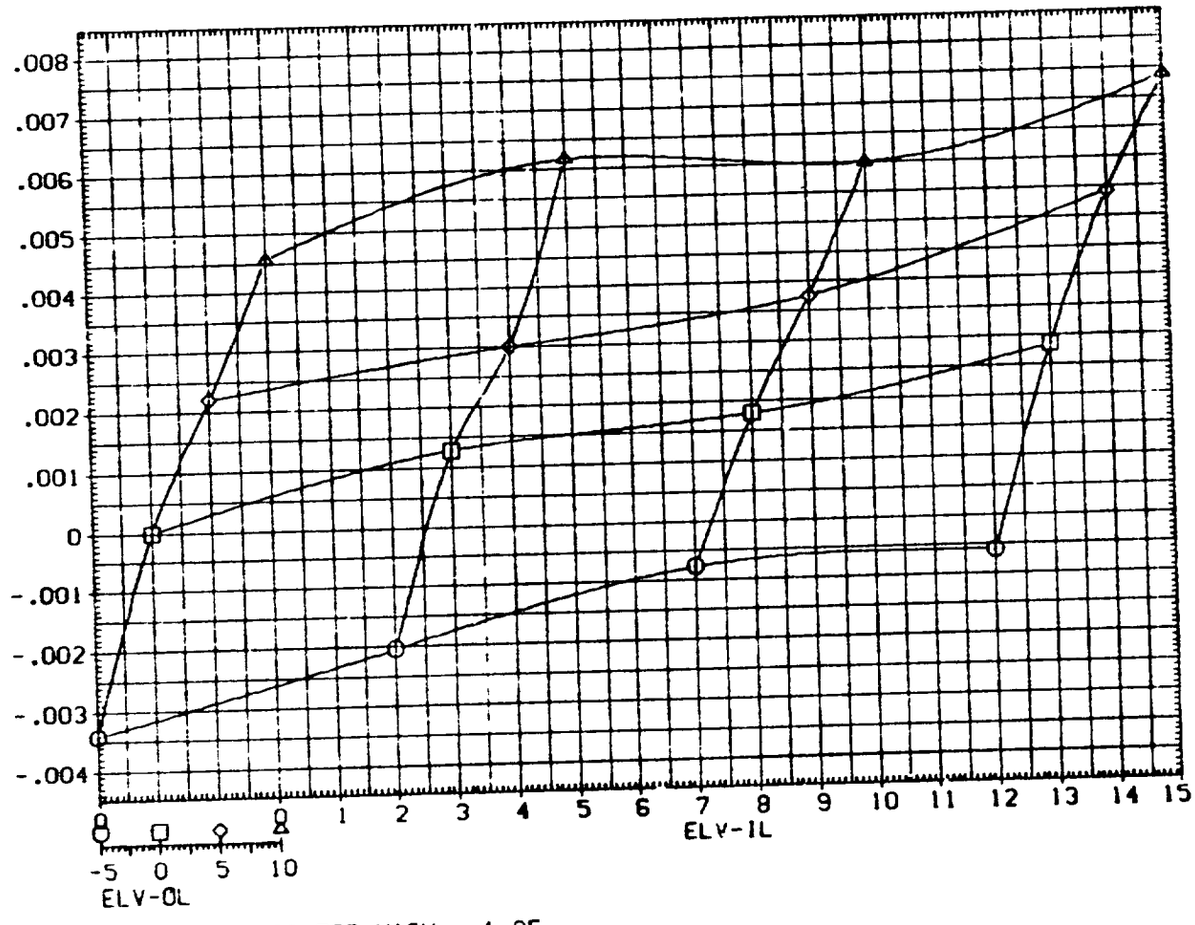
MSFC TWT 622 (IA:25) 74 OTS. M=1.05, ALPHA= 10.0(BINDSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.050	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.05

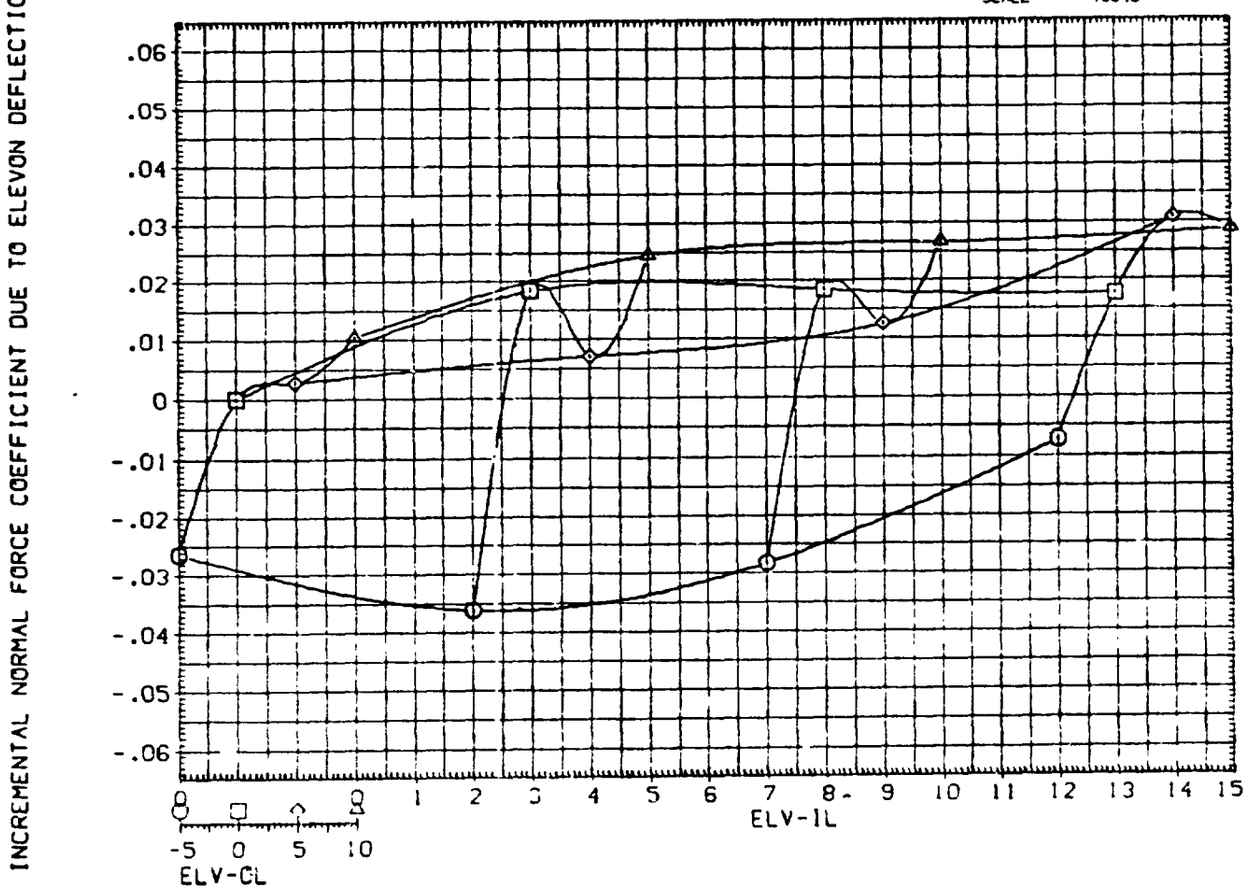
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-10.0(BINESA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
LREF	1290.3200	INCHES
BREF	1290.3200	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

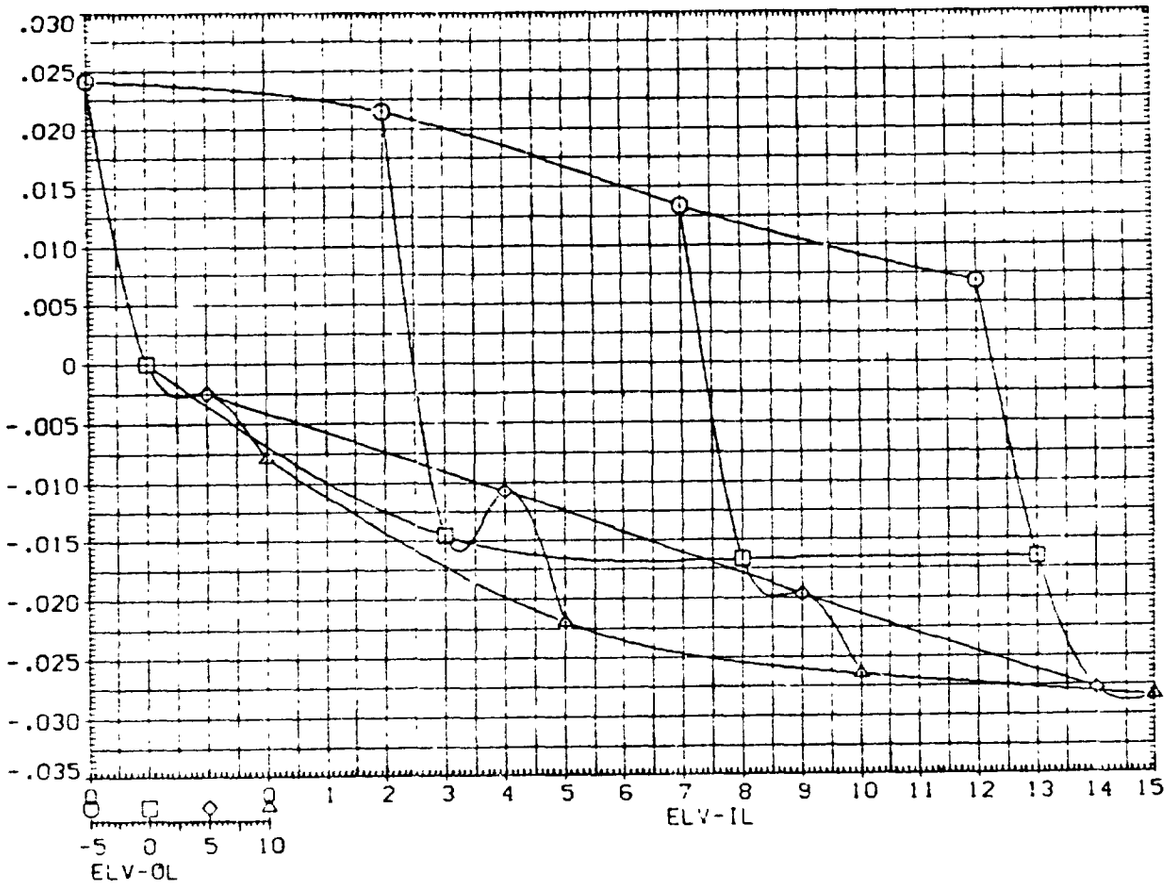
MSFC TWT 622 (1A;25) 74 CTS. M= 1.2. ALPHA=-10.0(BINESA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1440.3000	INCHES
BREF	1440.3000	INCHES
XMRP	970.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

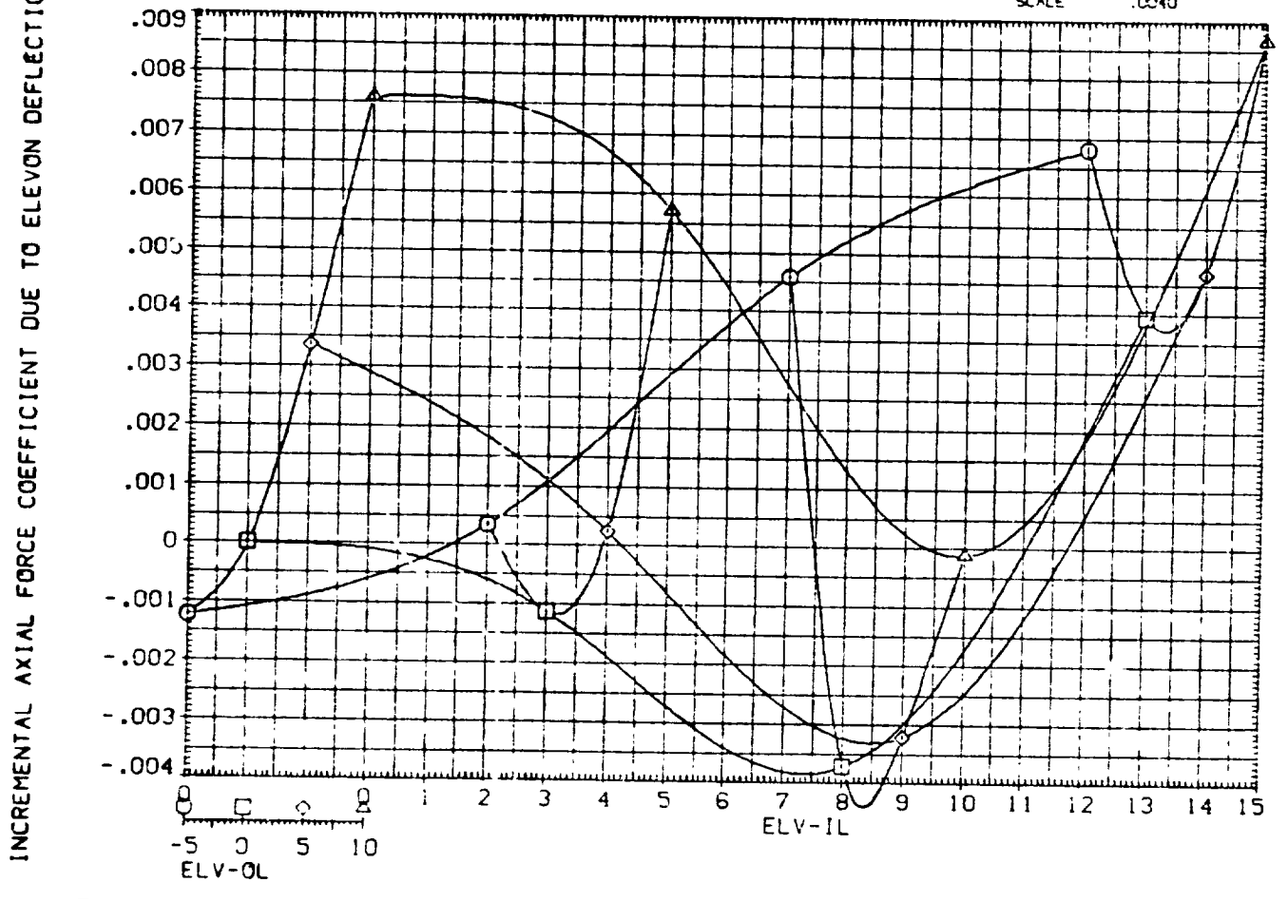
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-10.0(BINESA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

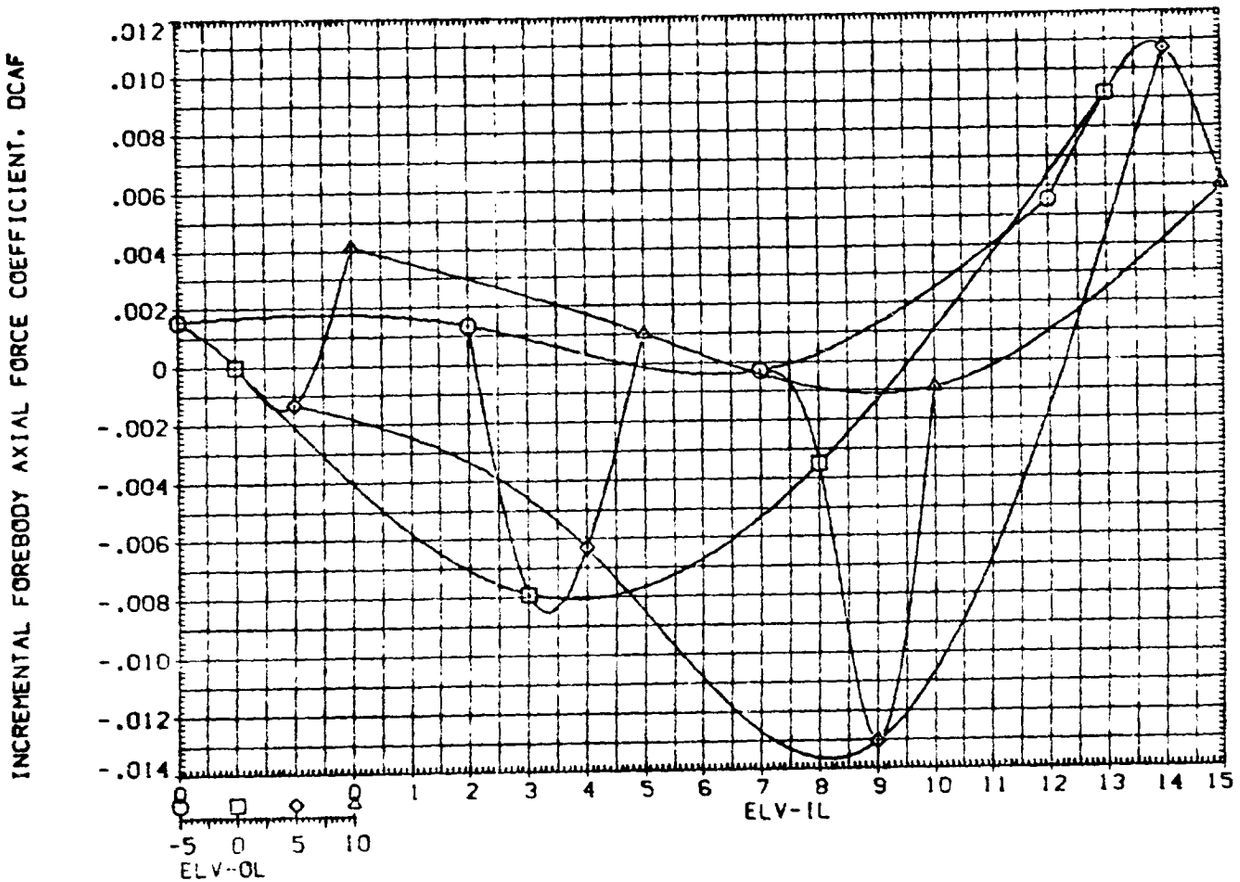
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-10.0(BINESA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	[illegible]	INCHES
BREF	[illegible]	INCHES
XMRP	975.0000	IN. XT
YMRP	[illegible]	IN. YT
ZMRP	400.[illegible]	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

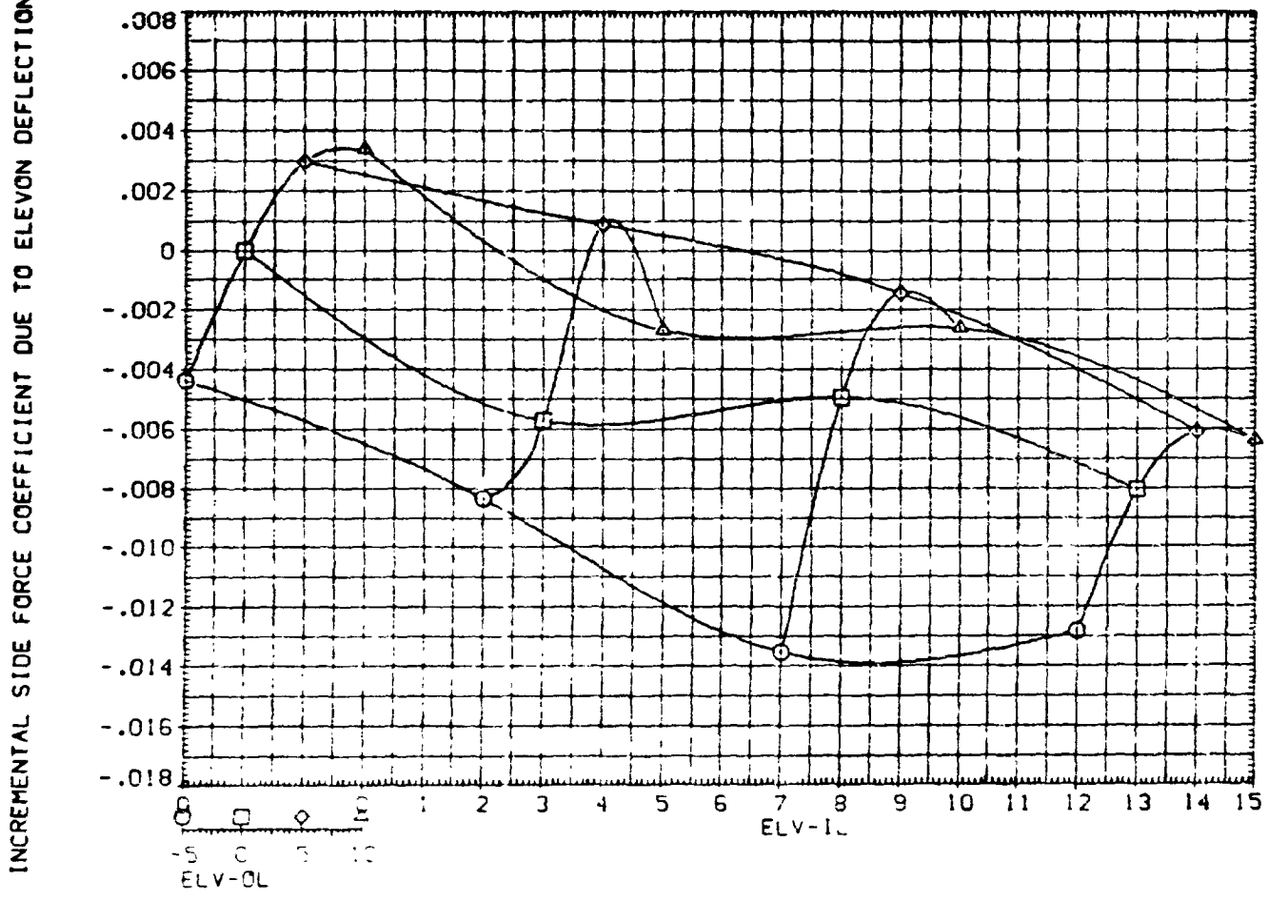
MSFC TWT 622 (IA125) 74 OTS. M= 1.2, ALPHA=-10.0(BINESA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

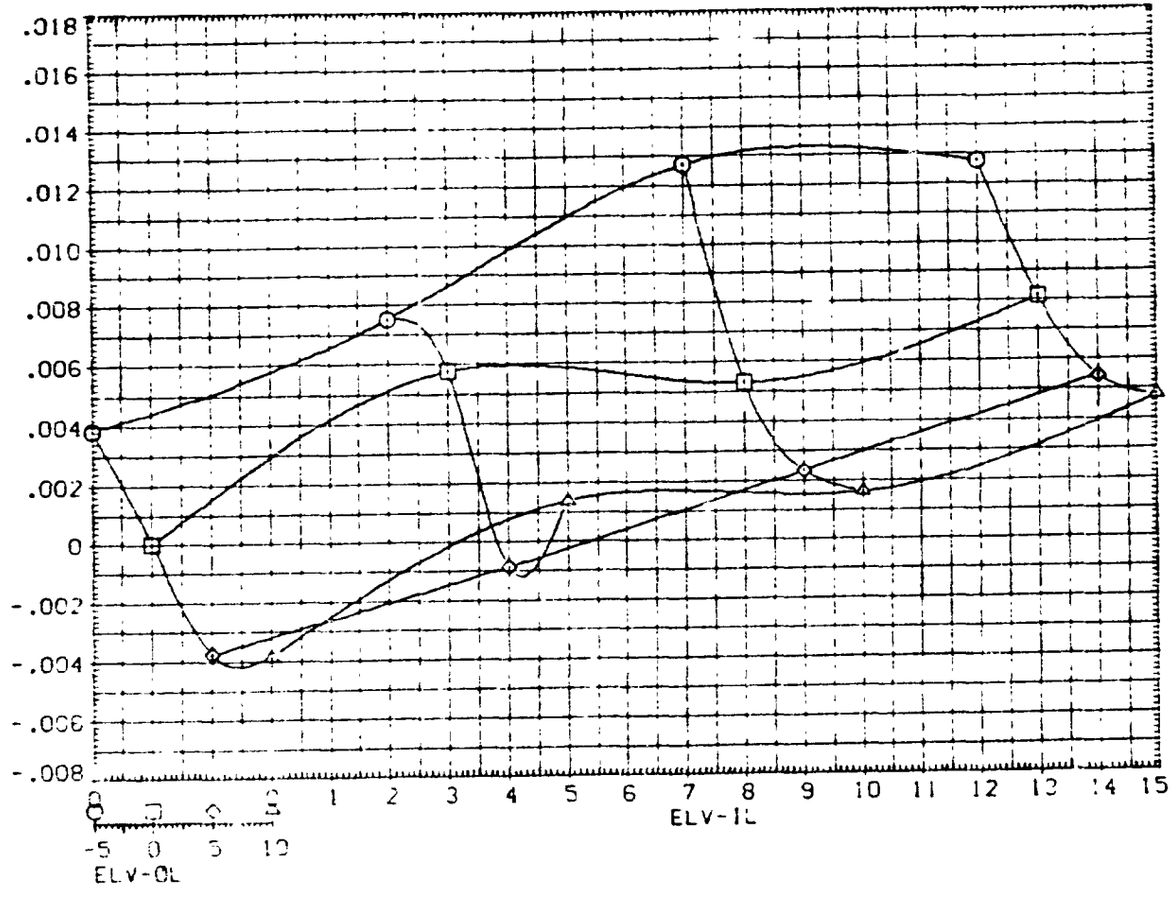
MSFC TWT 622 (IA125) 74 DTS. M= 1.2. ALPHA=-10.0(BINESA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1260.0000	INCHES
BREF	2690.0000	INCHES
XMPO	975.0000	IN
YMPO	.0000	IN
ZMPO	400.0000	IN
SCALE	.0040	



INCREMENTAL YAWING MOMENT COEFFICIENT DUE TO ELEVON DEFLECTION. DCYN

ELEVON EFFECTIVENESS FOR MACH = 1.20

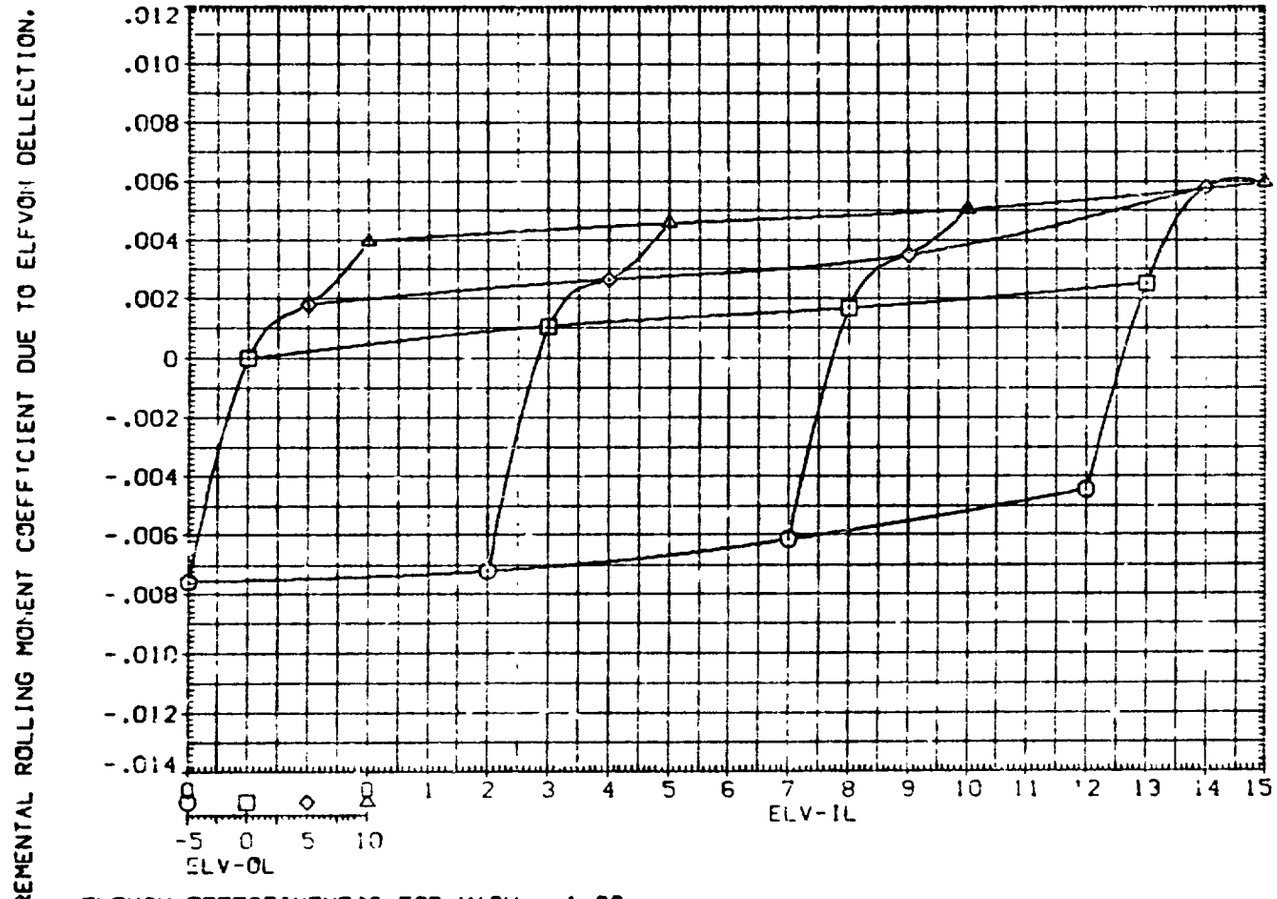
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-10.0(BINESA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1260.3000	INCHES
BREF	1260.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

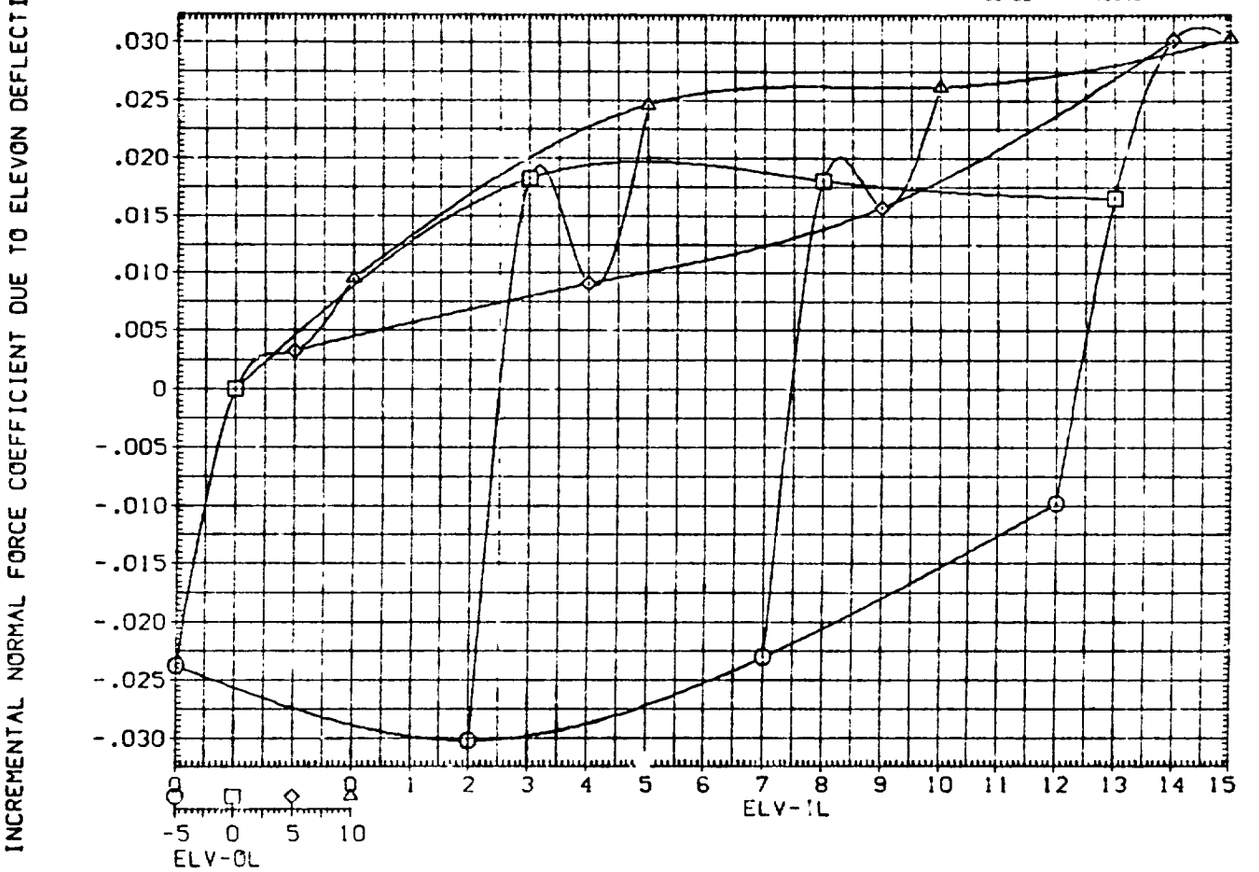
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-8.0 (BINESB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	280.0000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

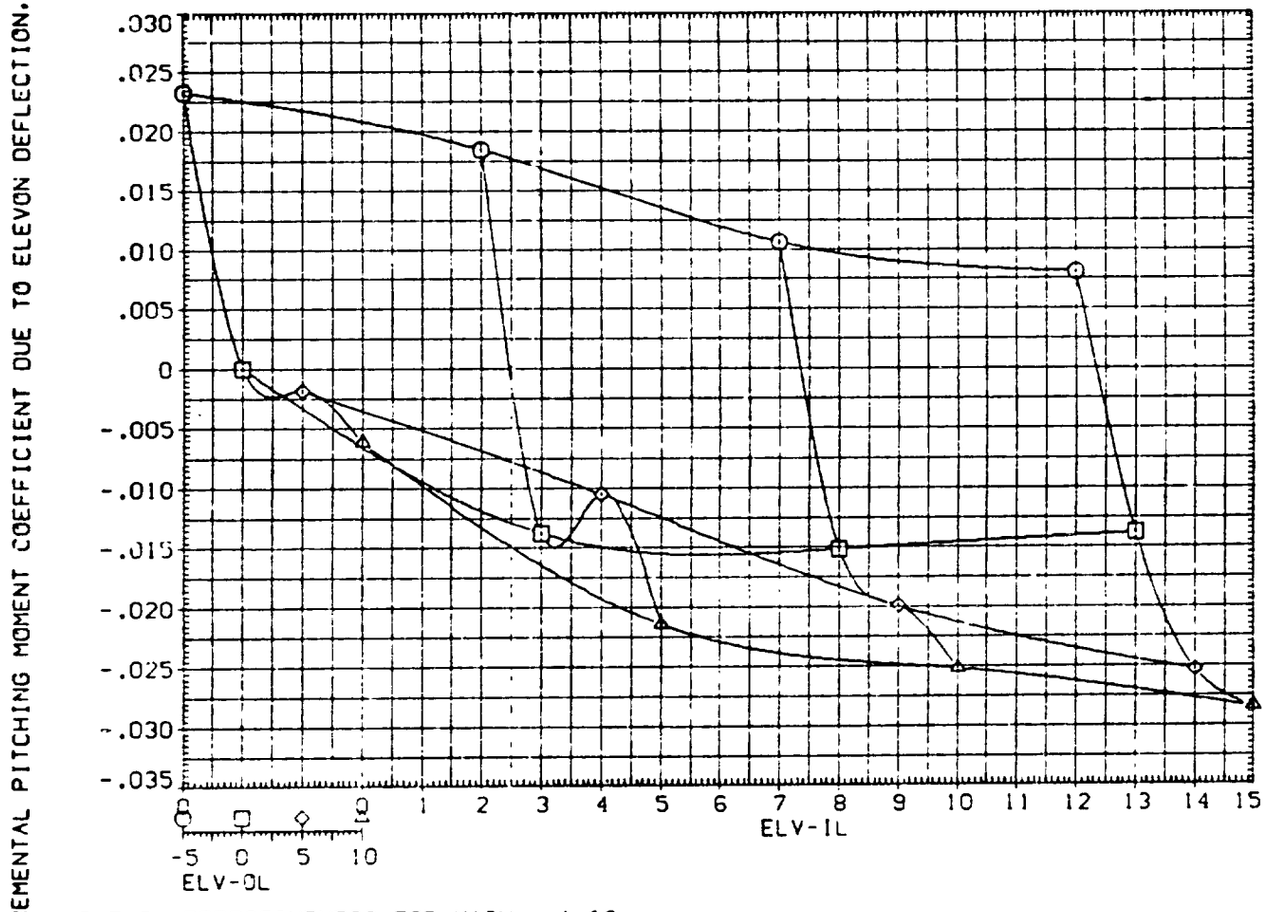
MSFC TWT 622 (IA125) 74 OTS. M= 1.2, ALPHA=-8.0 (BINESB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1220.3000	INCHES
BREF	1293.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

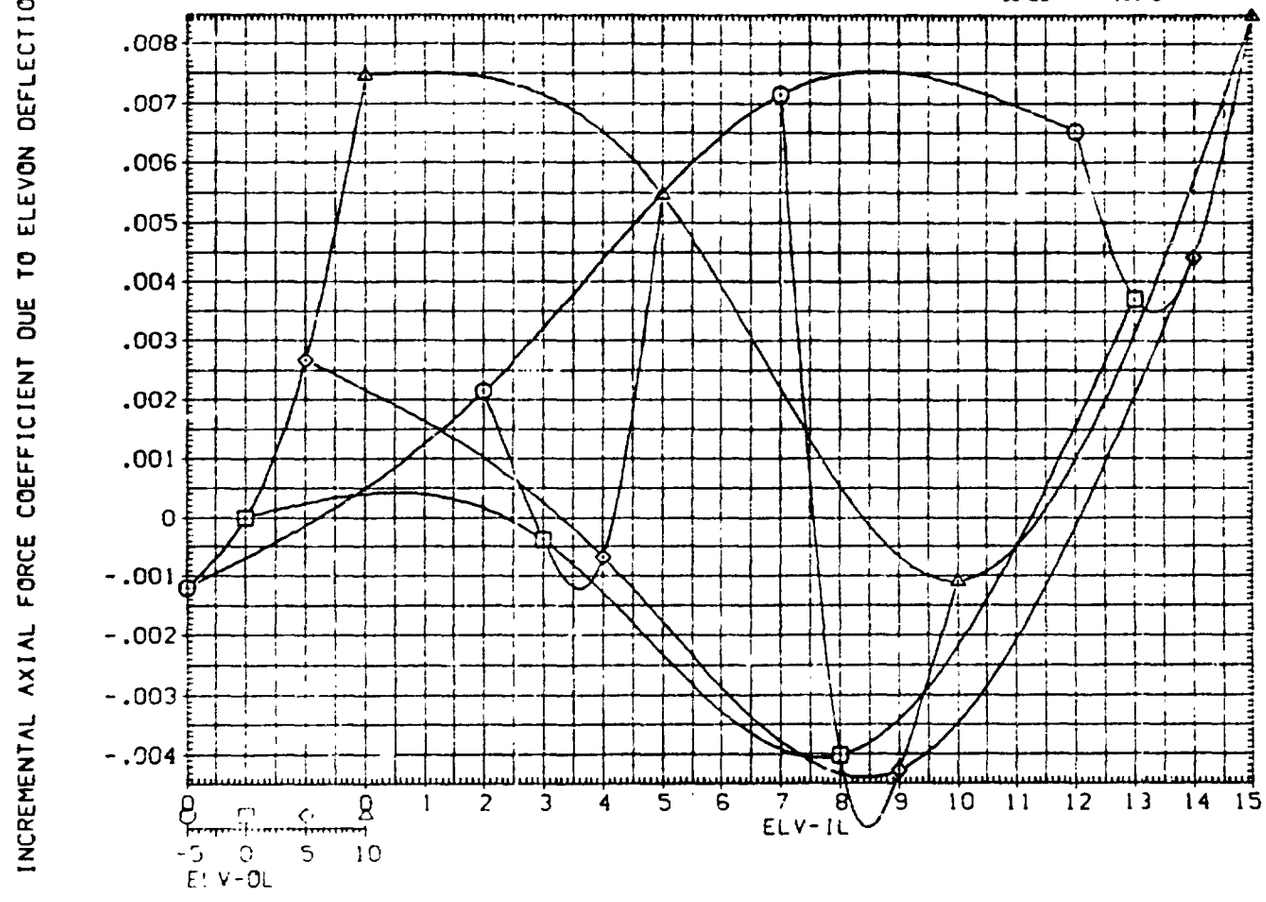
MSFC TWT 622 (A125) 74 DTS. M= 1.2. ALPHA=-8.0 (BINESB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	420.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

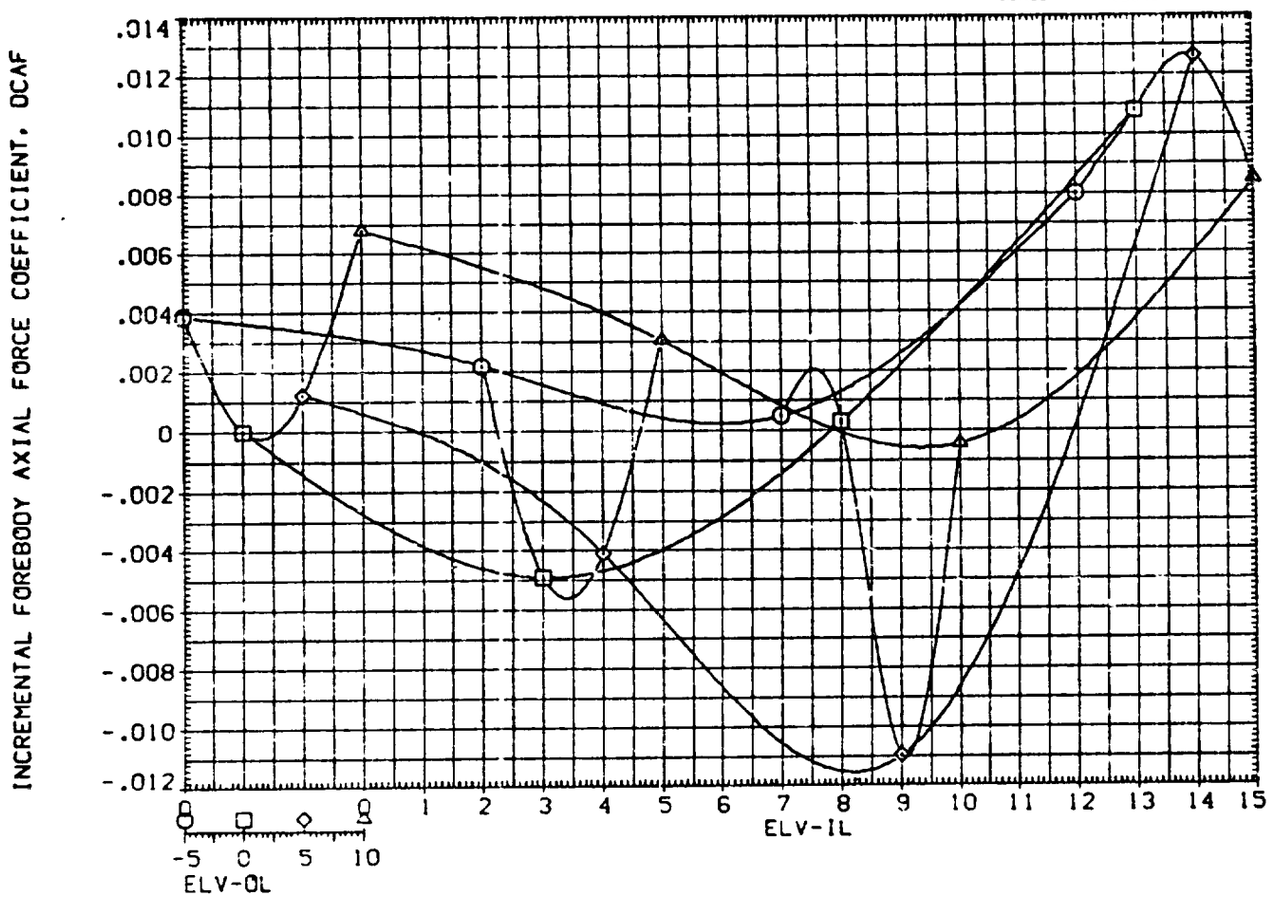
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-8.0 (BINESB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



E. VON EFFECTIVENESS FOR MACH = 1.20

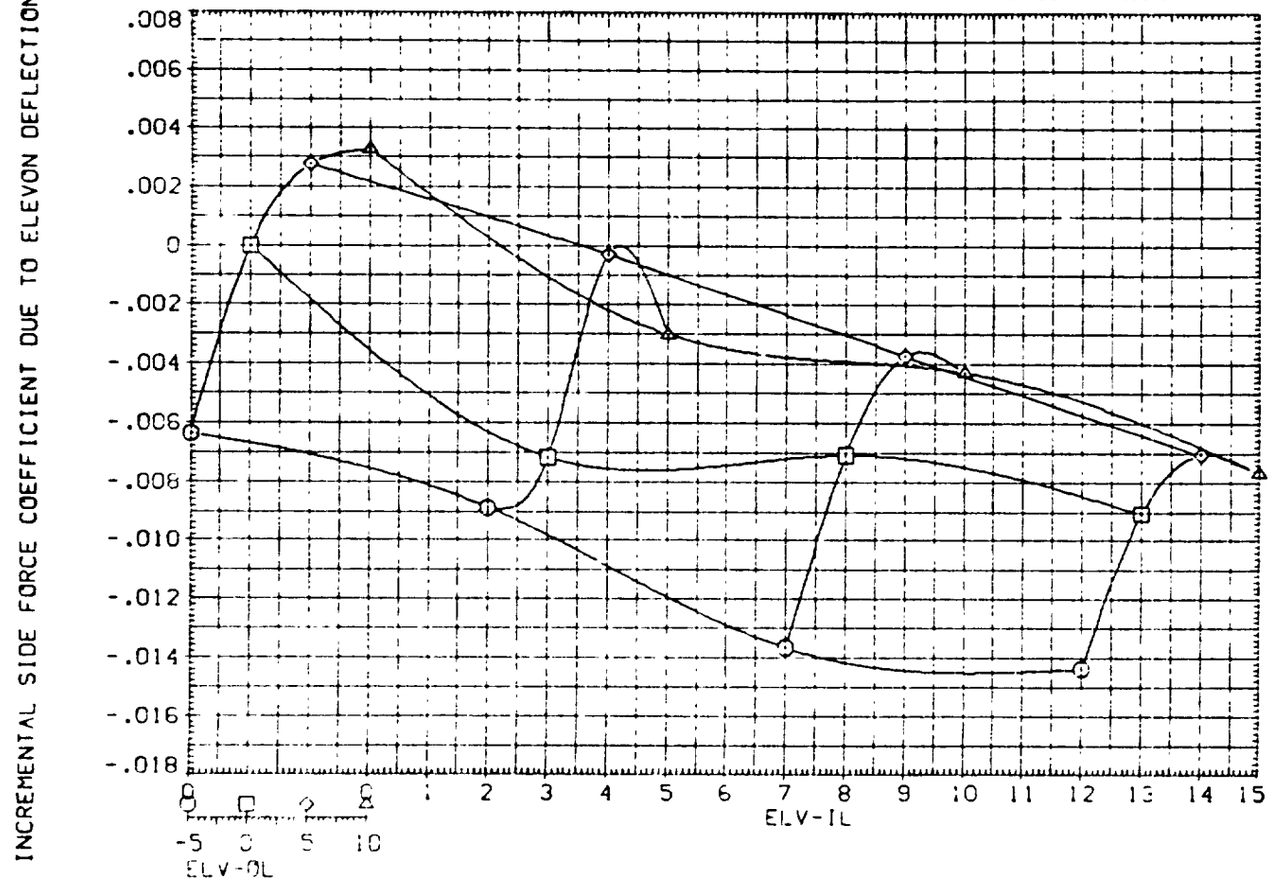
MSFC TWT 622 (IA125) 74 OTS. M= 1.2, ALPHA=-8.0 (BINESB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	[illegible]	[illegible]
BREF	[illegible]	[illegible]
XMRP	976.0000	[illegible] XT
YMRP	[illegible]	[illegible] YT
ZMRP	400.0000	[illegible] ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

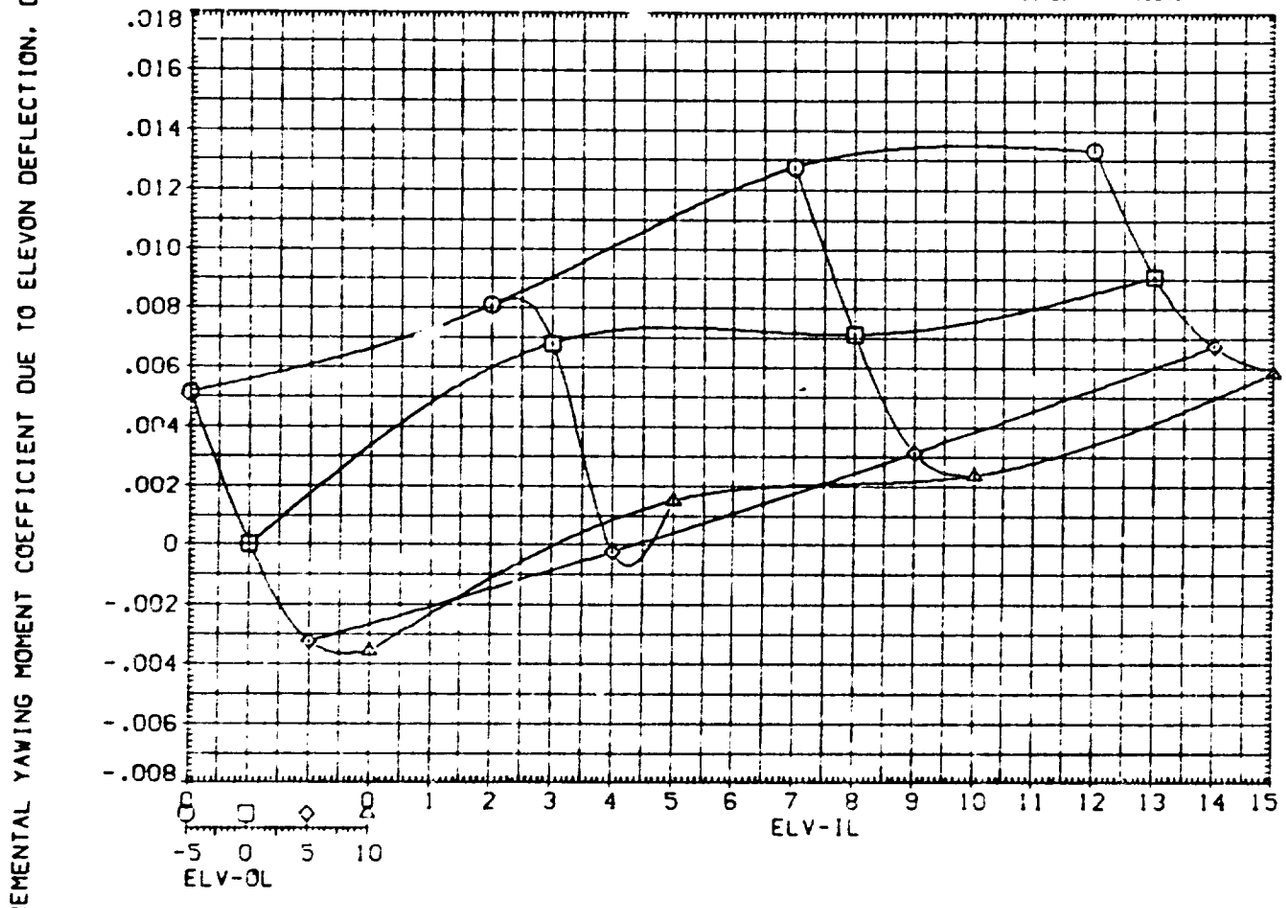
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-8.0 (BINESB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

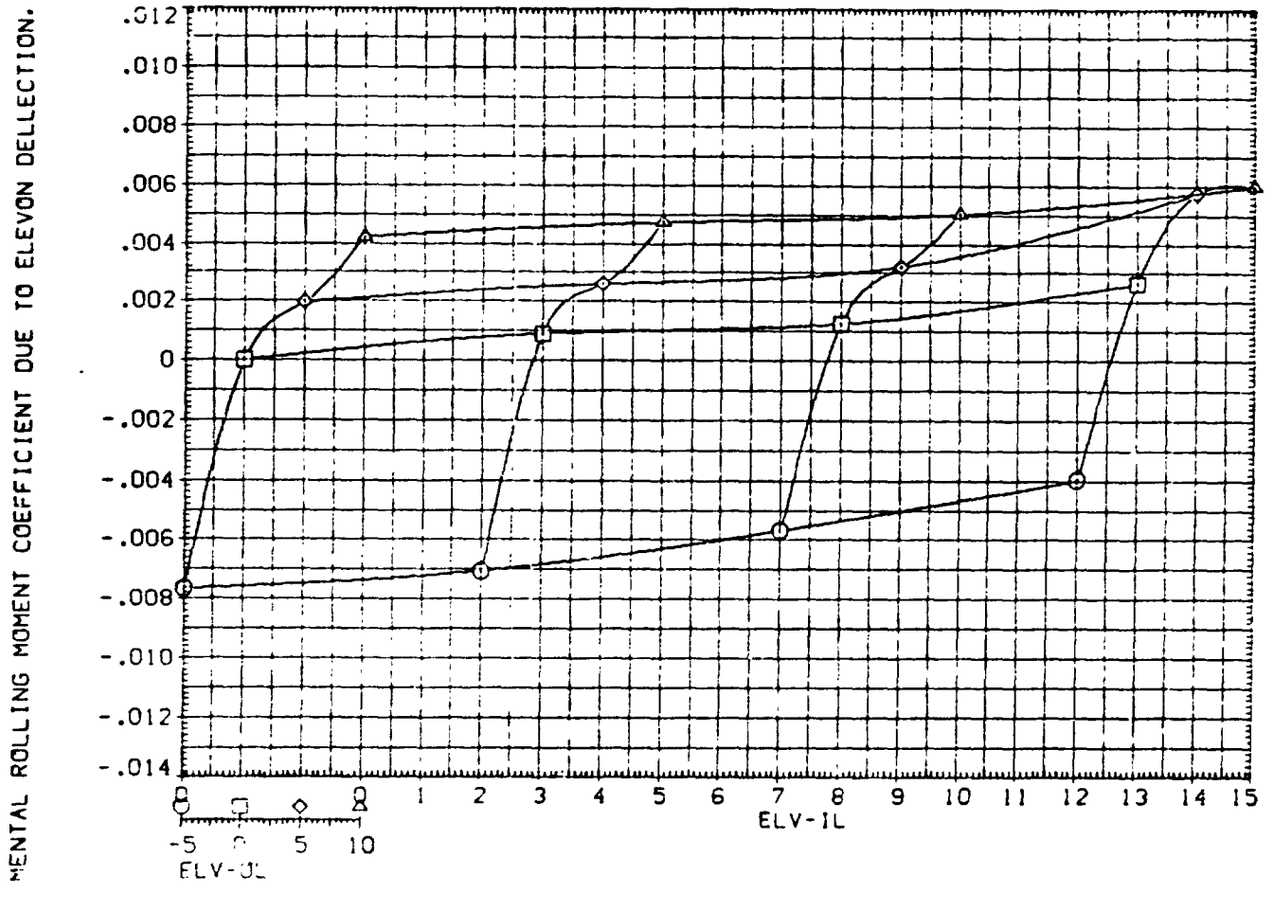
MSFC TWT 622 (IA125) 74 CTS. M= 1.2, ALPHA=-8.0 (BINESB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

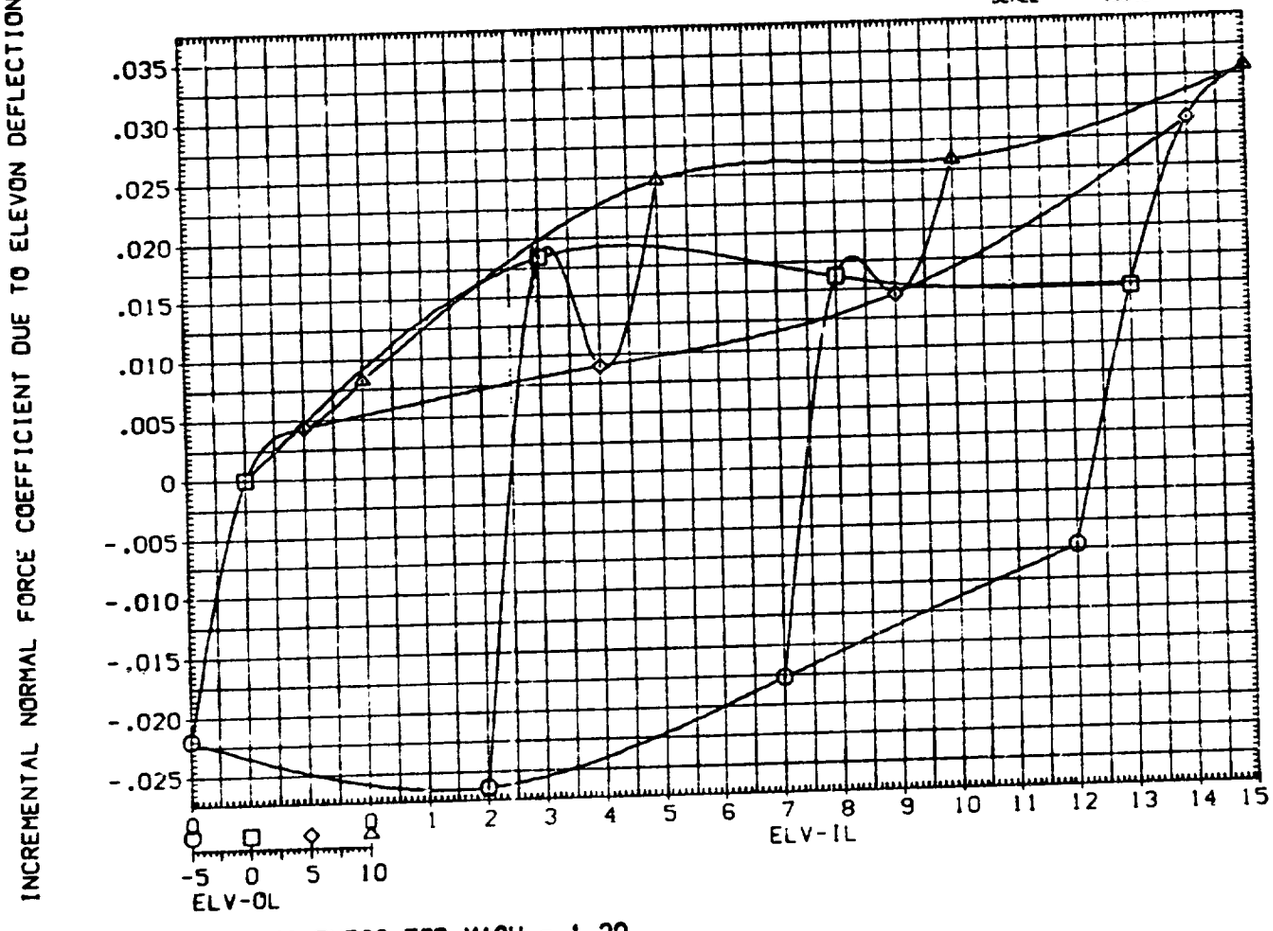
MSFC TWT 622 (IA125) 74 OTS. M= 1.2, ALPHA=-6.0 (BINESC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0010	



ELEVON EFFECTIVENESS FOR MACH = 1.20

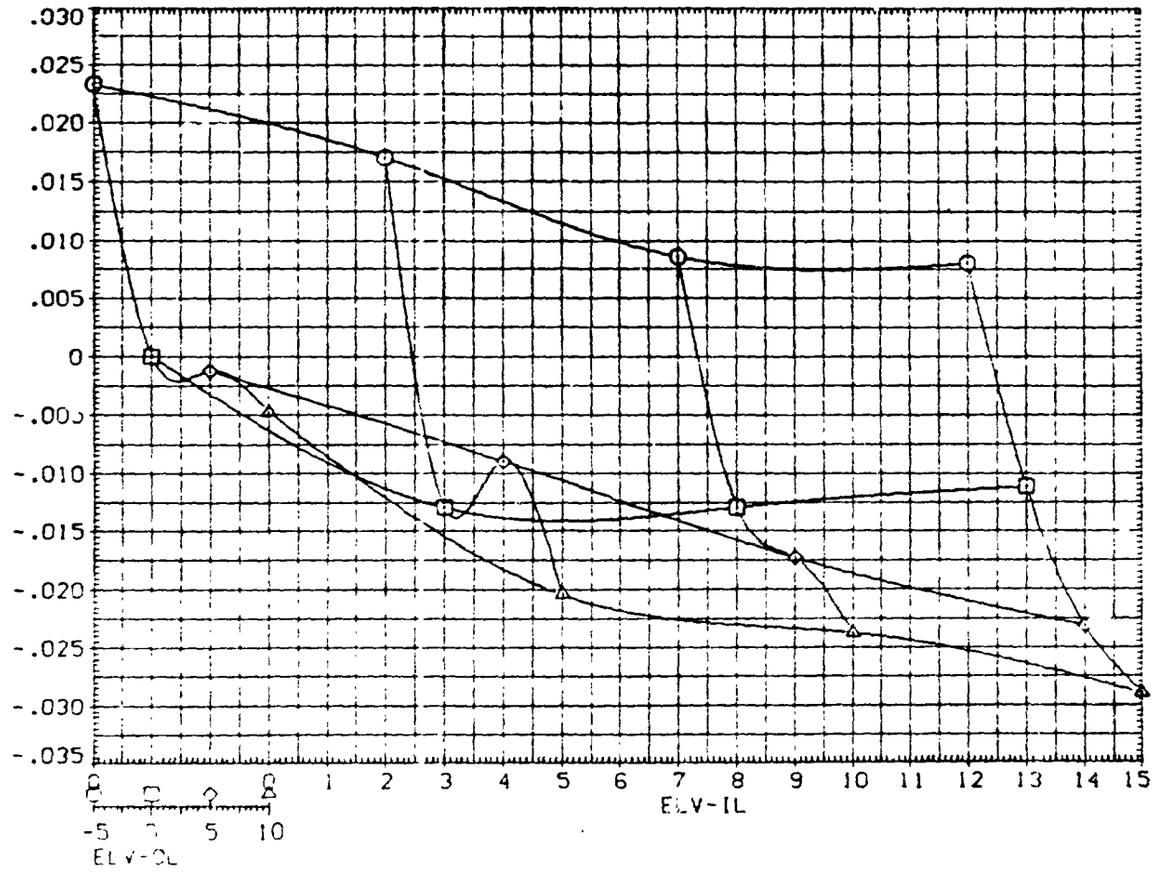
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-6.0 (BINESC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1220.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	[illegible]
YMRP	.0000	[illegible]
ZMRP	400.0000	[illegible]
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

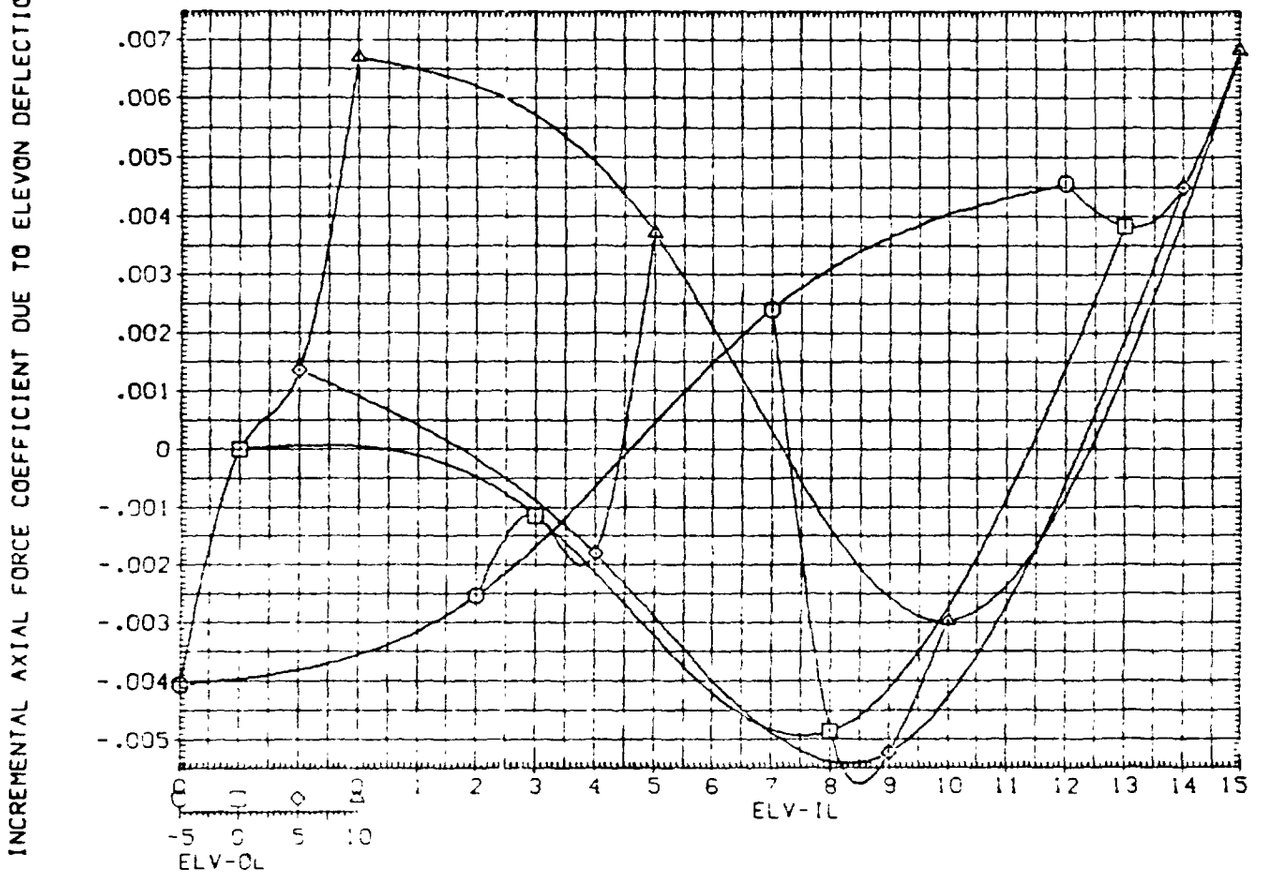
MSFC TWT 622 (IA125) 74 DTS, M= 1.2, ALPHA=-6.0 (BINESC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

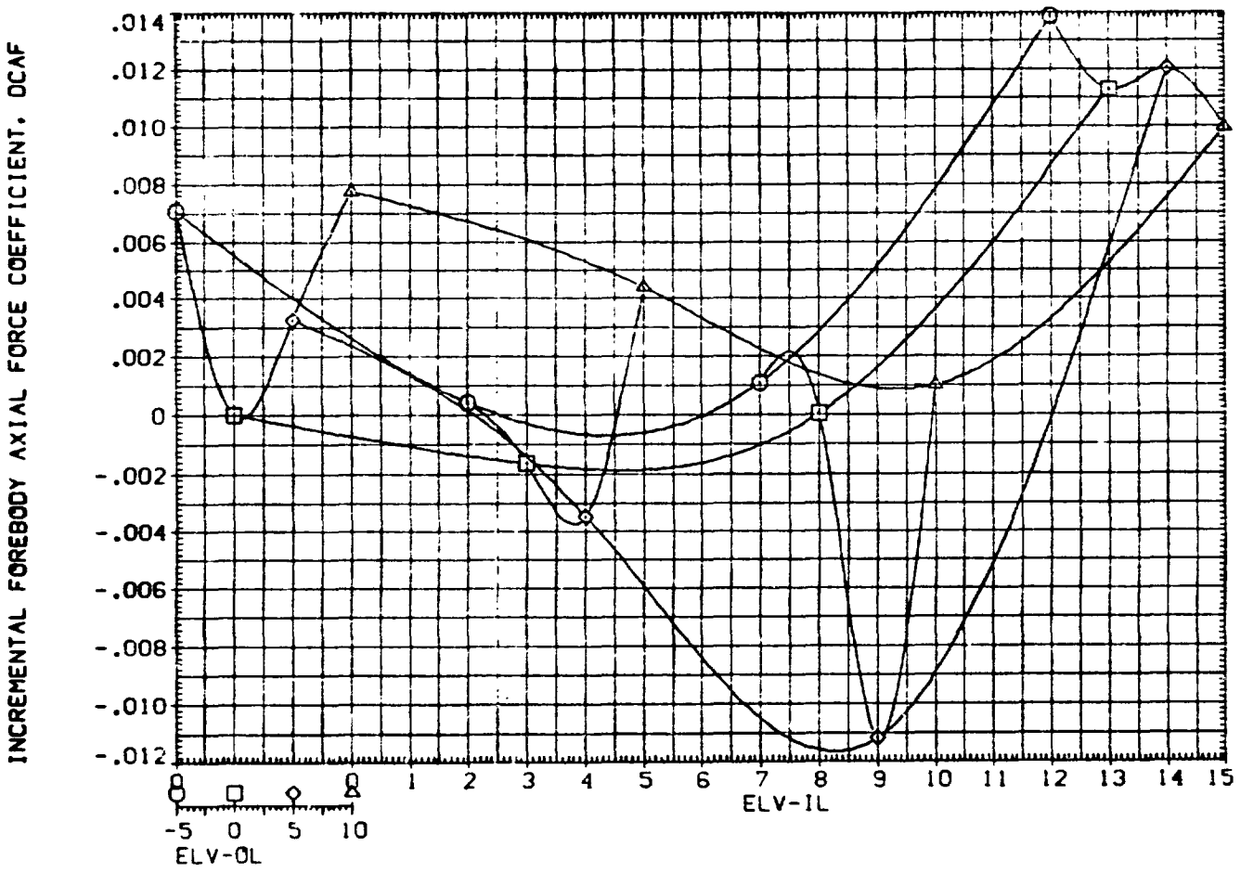
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-6.0 (BINESC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

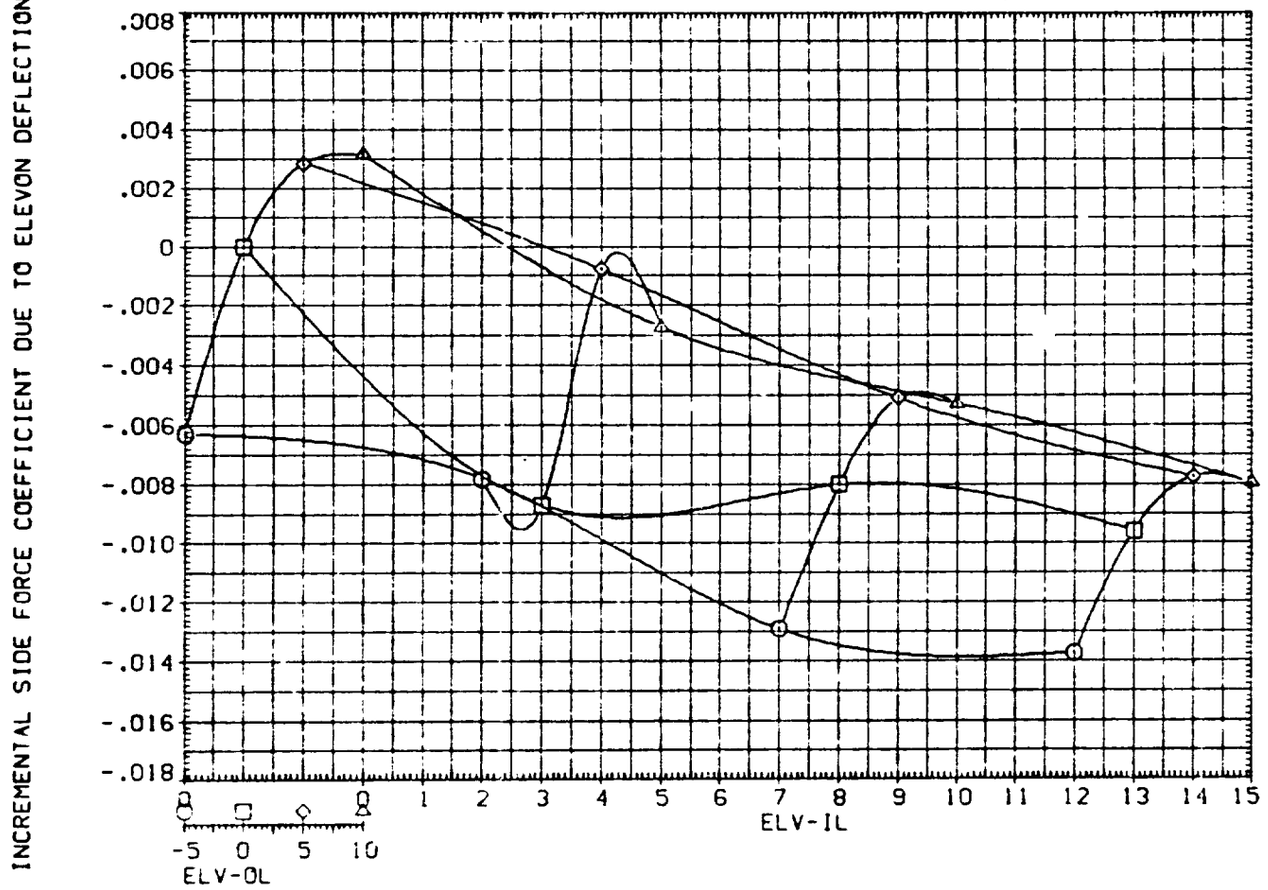
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-6.0 (B1NESC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1220.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

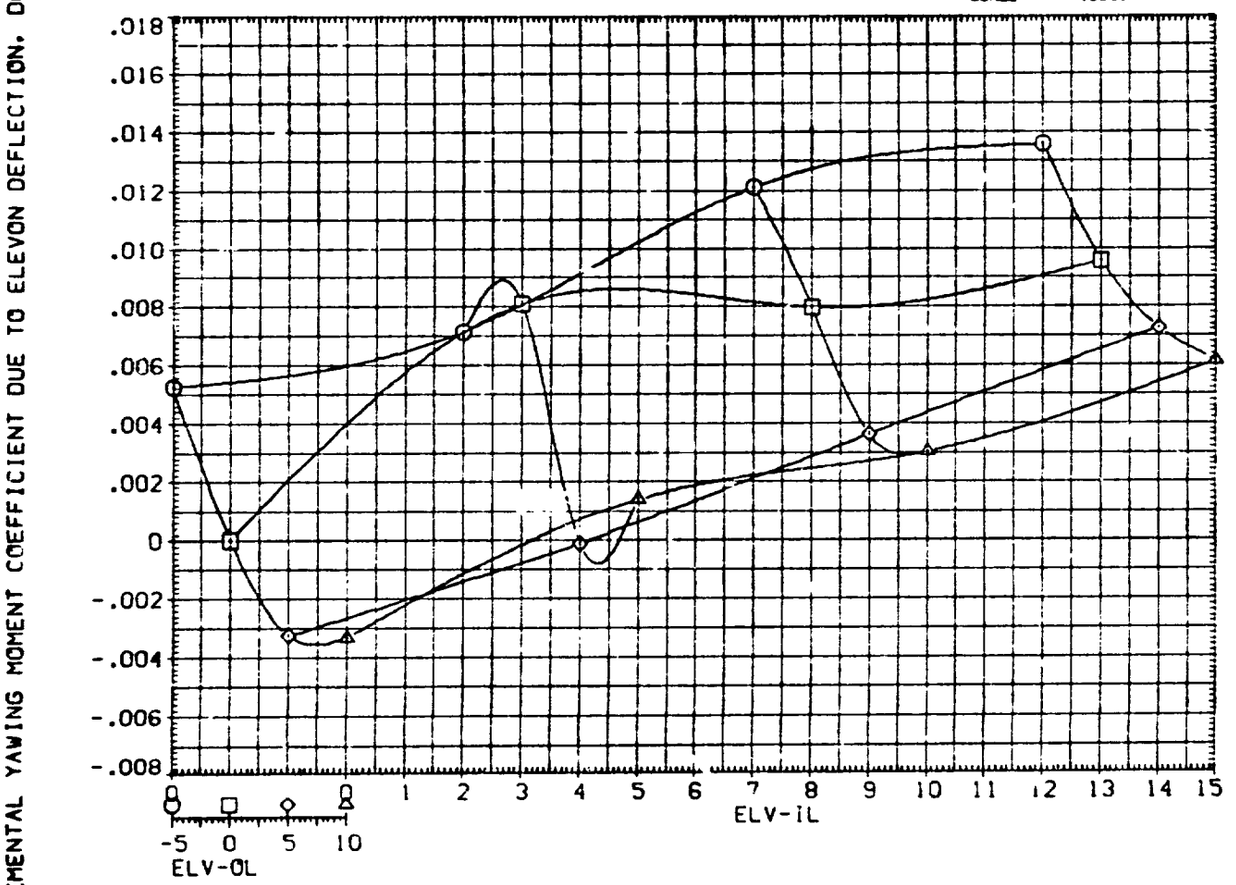
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-6.0 (BINESC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

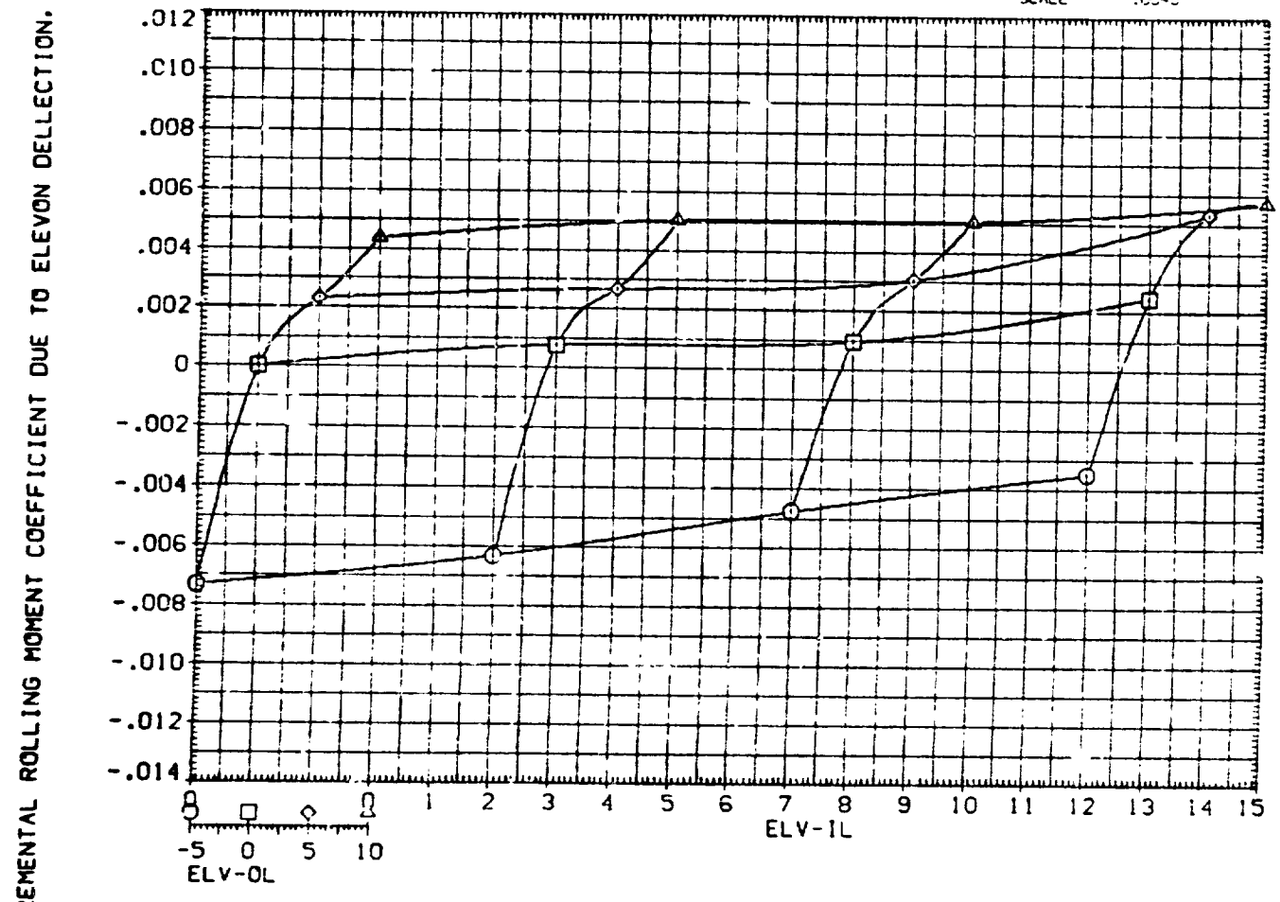
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-6.0 (BINESC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

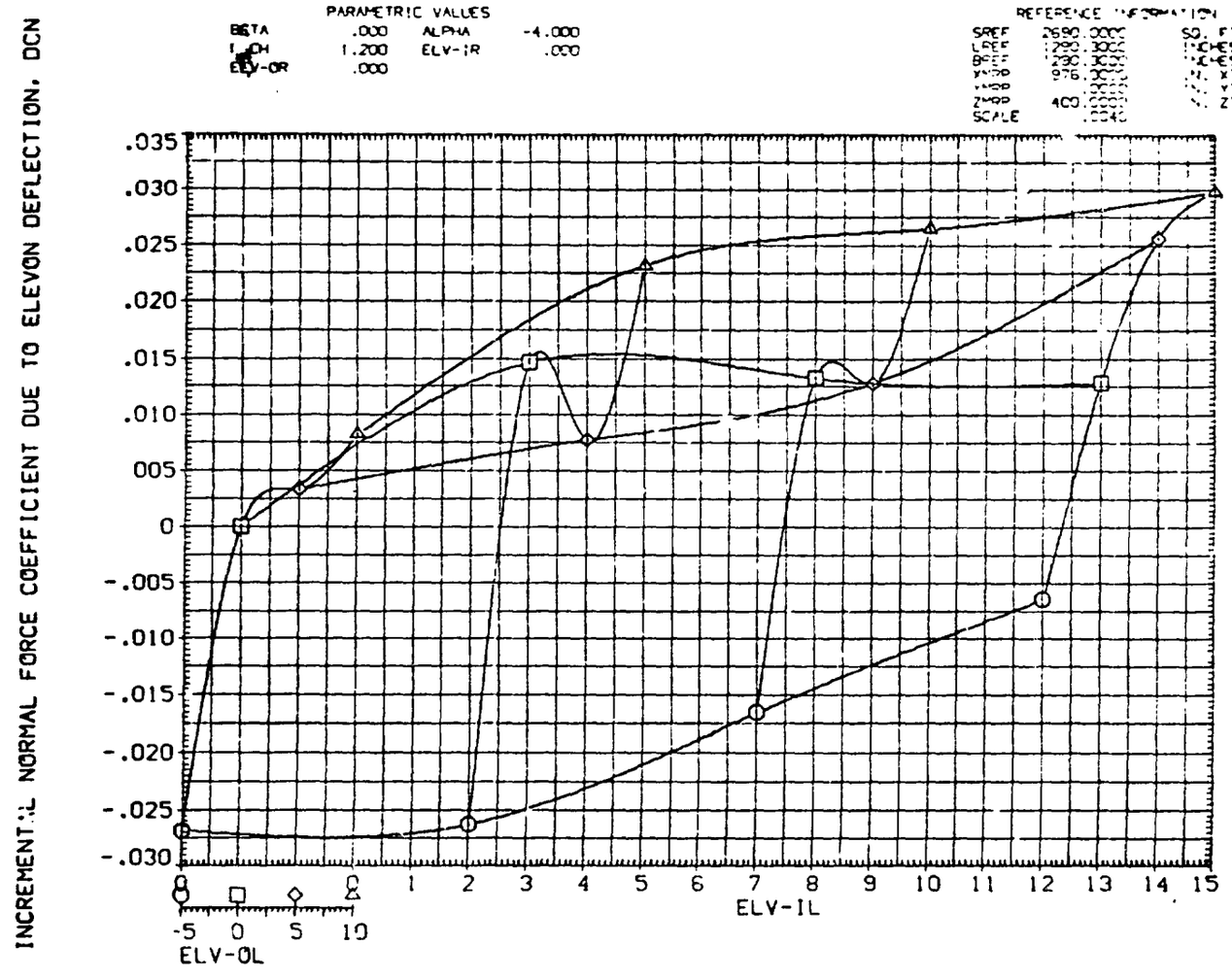
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

MSFC TWT 622 (IA125) 74 CTS. M= 1.2, ALPHA=-4.0 (BINESD)



ELEVON EFFECTIVENESS FOR MACH = 1.20

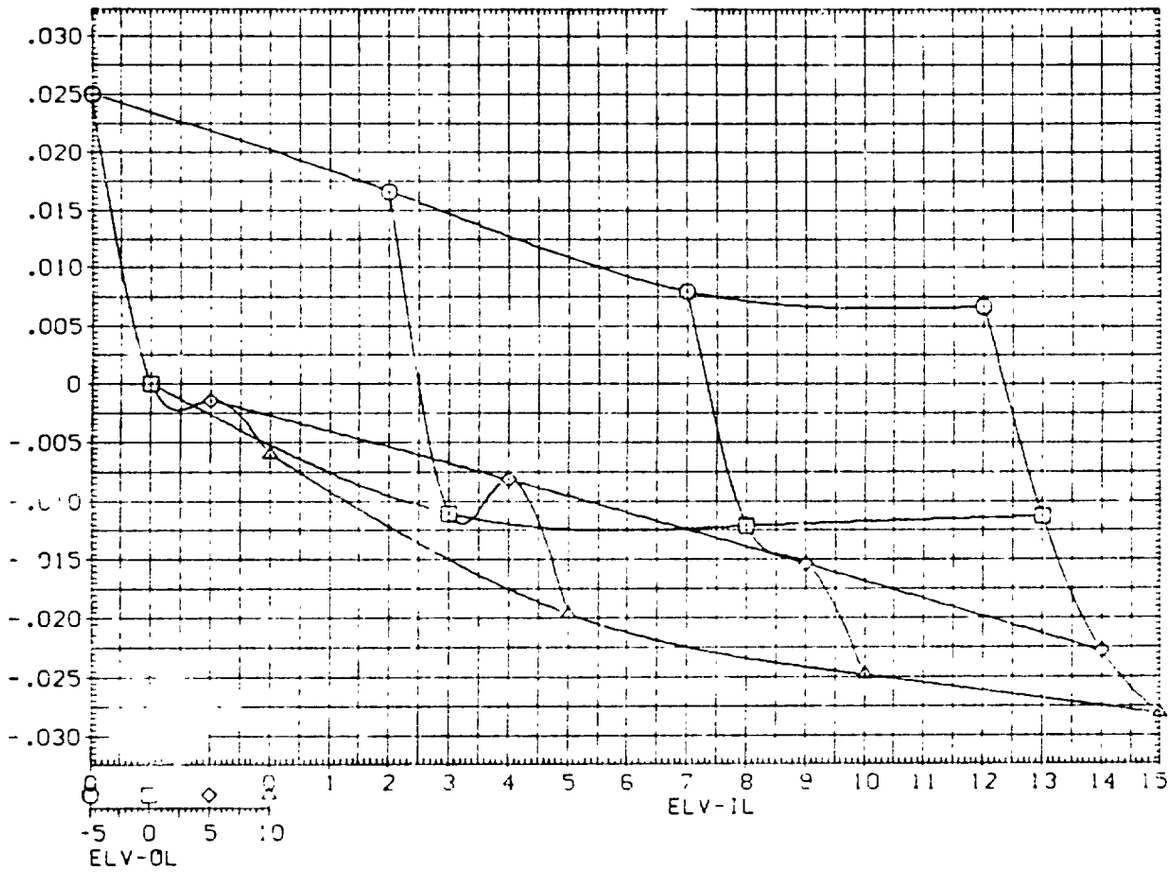
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-4.0 (BINESD)

PARAMETRIC VALUES

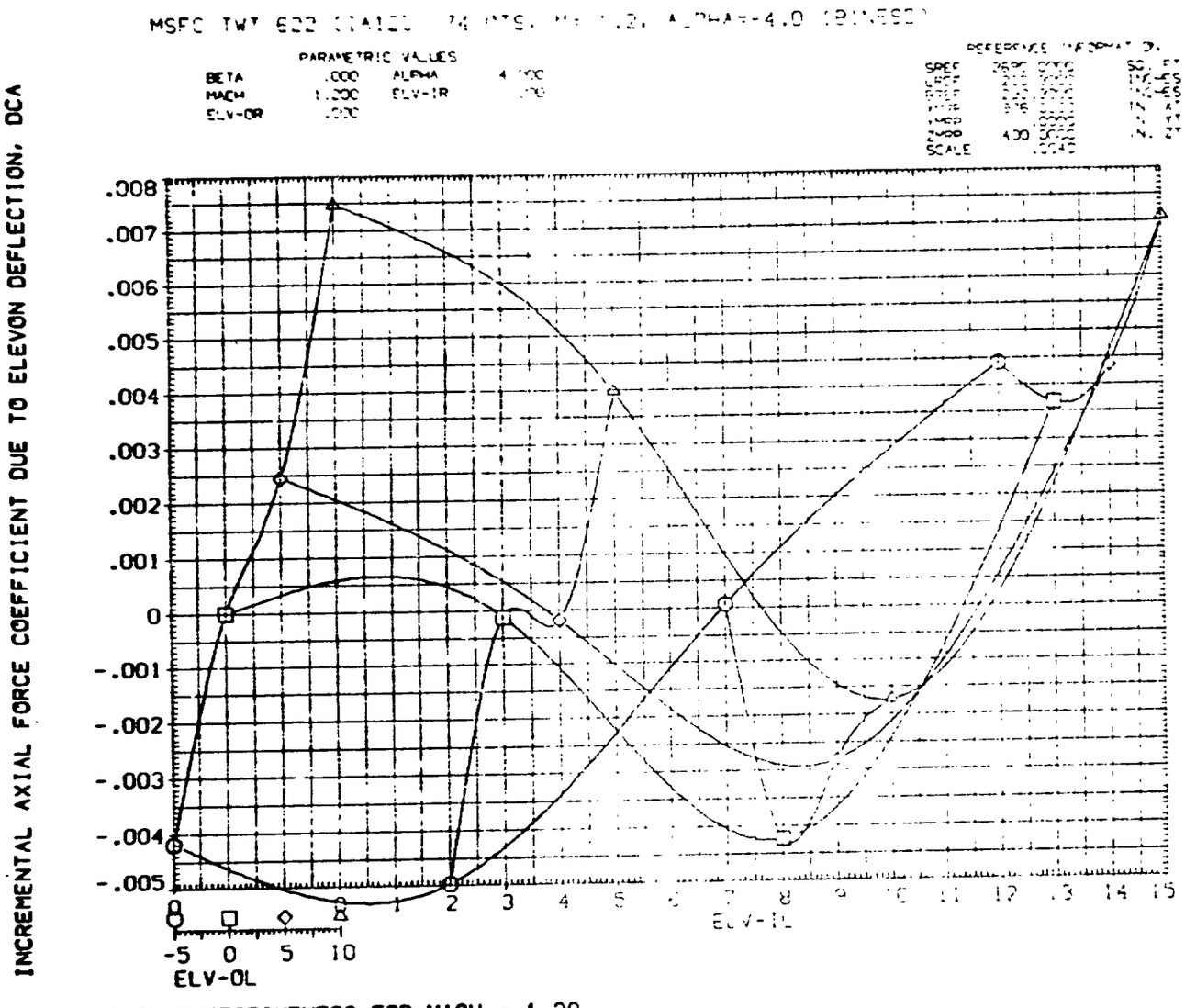
BETA	.000	ALPHA	-4.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	XT
YMRP	[illegible]	YT
ZMRP	400.0000	ZT
SCALE	1.40	



ELEVON EFFECTIVENESS FOR MACH = 1.20



ELEVON EFFECTIVENESS FOR MACH = 1.20

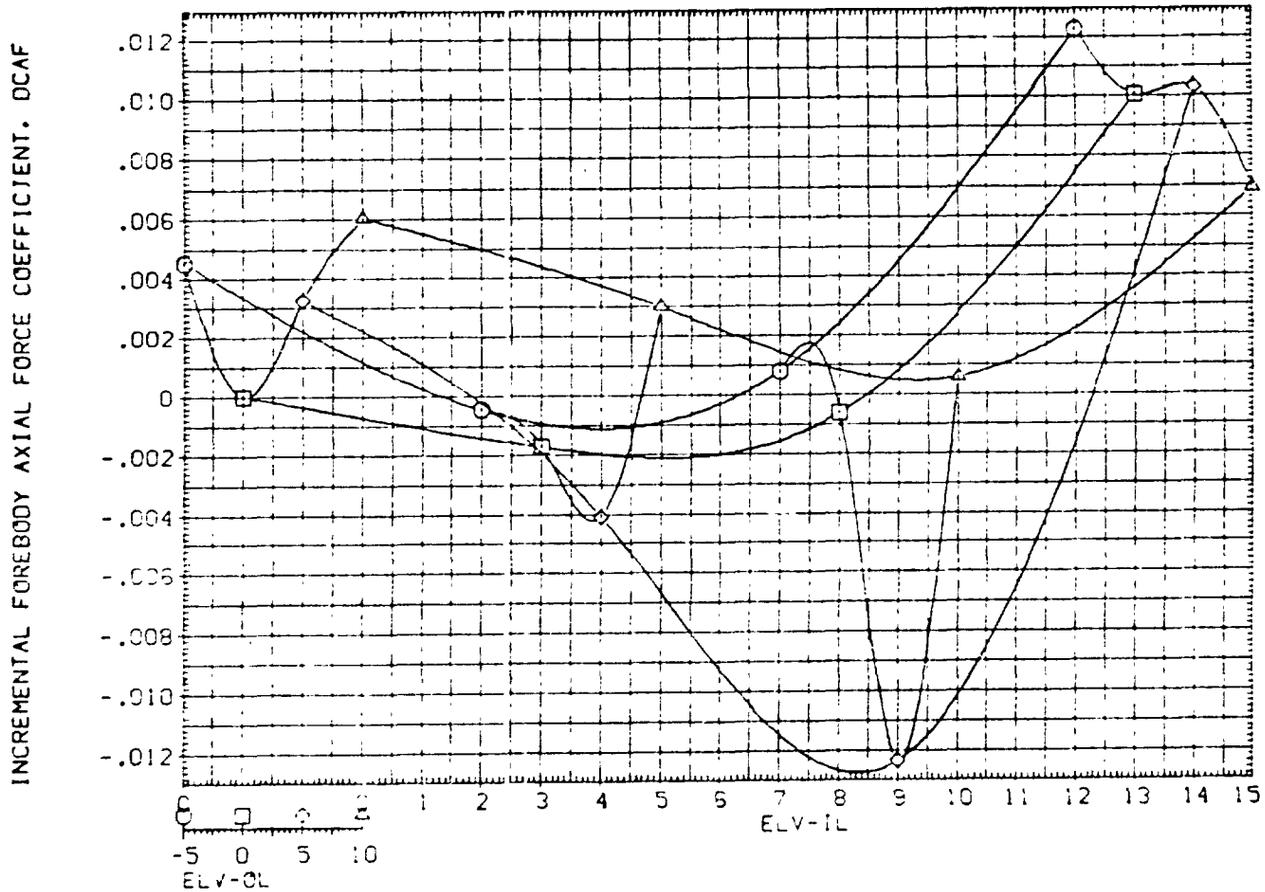
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-4.0 (BINESD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.200	ELV-.R	.000
ELV-OP	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	290.3000	INCHES
BREF	290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

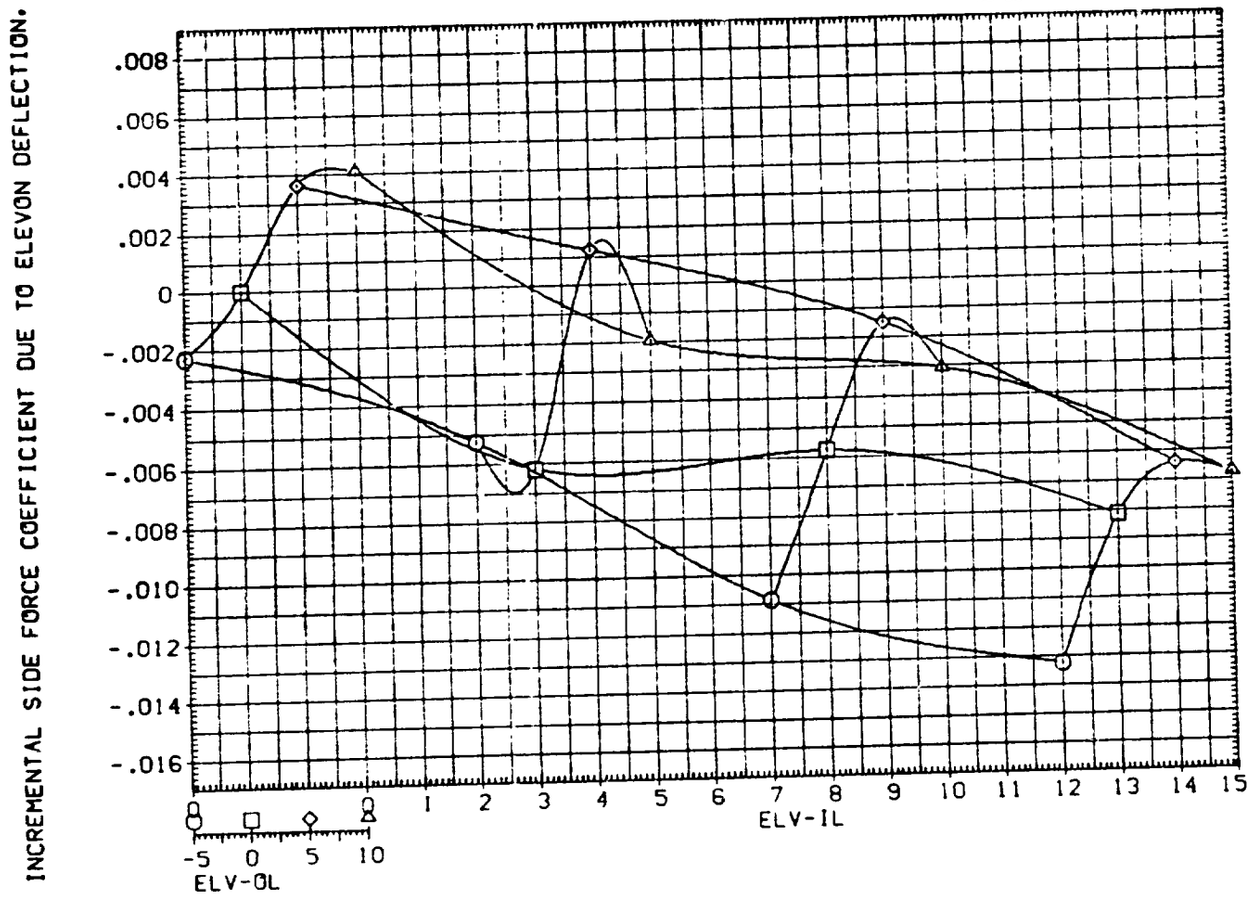
MSFC TWT 622 (1A125) 74 OTS. M= 1.2, ALPHA=-4.0 (B1NESD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

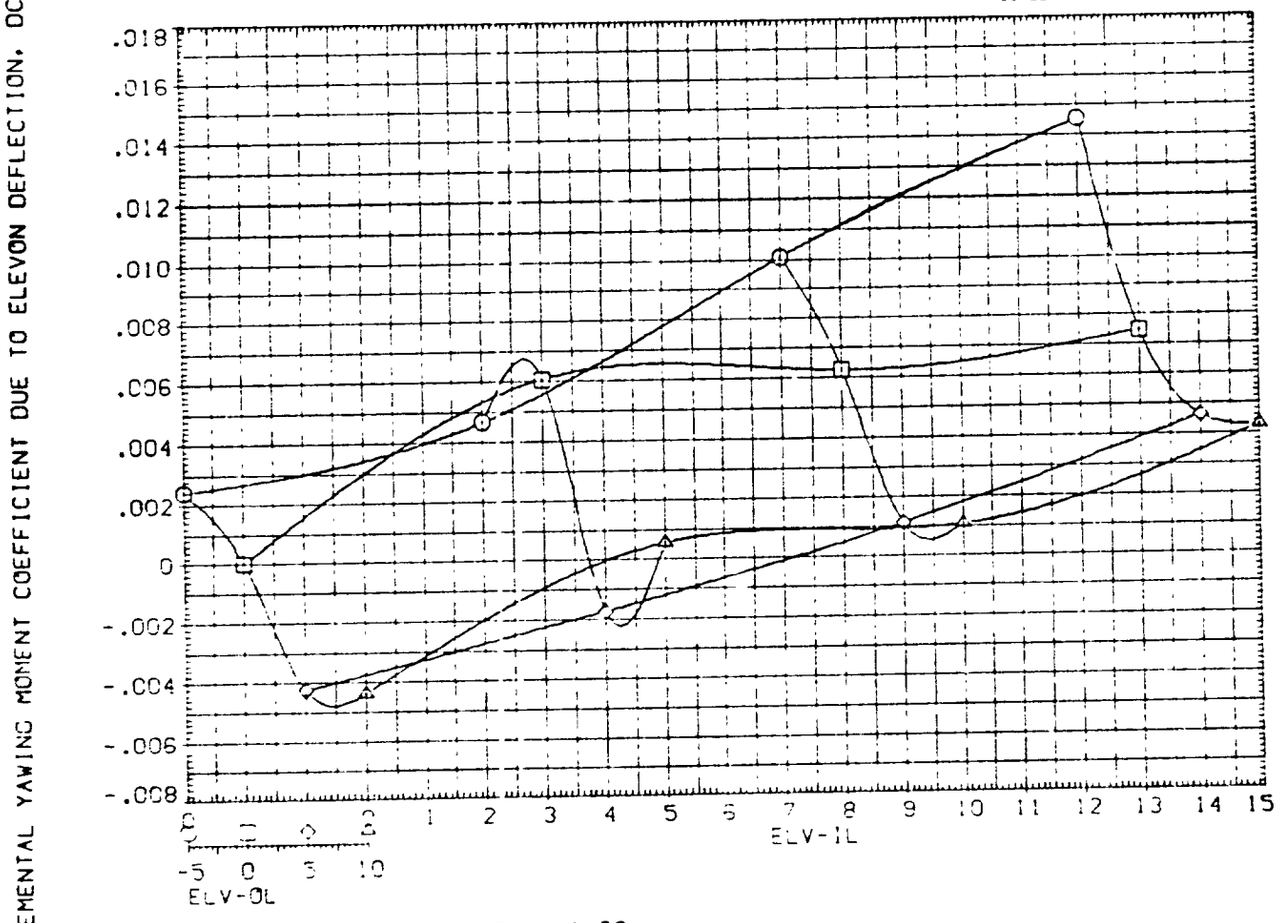
MSFC [illegible] 622 (IA125) 74 OTS. M= 1.2. ALPHA=-4.0 (BINESO)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.200	ELV-IR	.000
ELV-OP	.000		

REFERENCE INFORMATION

SREF	2600.0000	SQ. FT
LREF	[illegible]	INCHES
BREF	[illegible]	INCHES
XMRP	[illegible]	IN. XT
YMRP	[illegible]	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

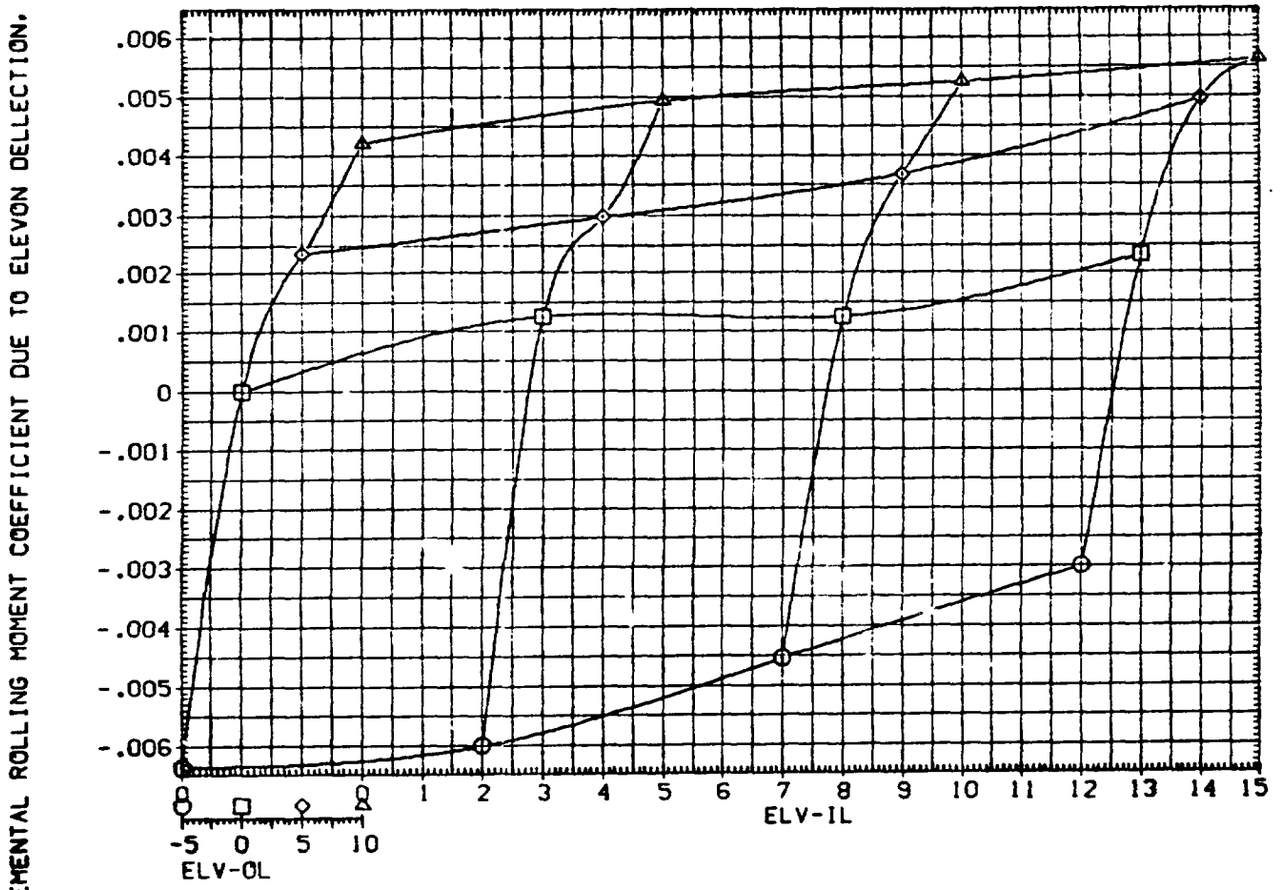
MSFC :WT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-4.0 (BINESD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

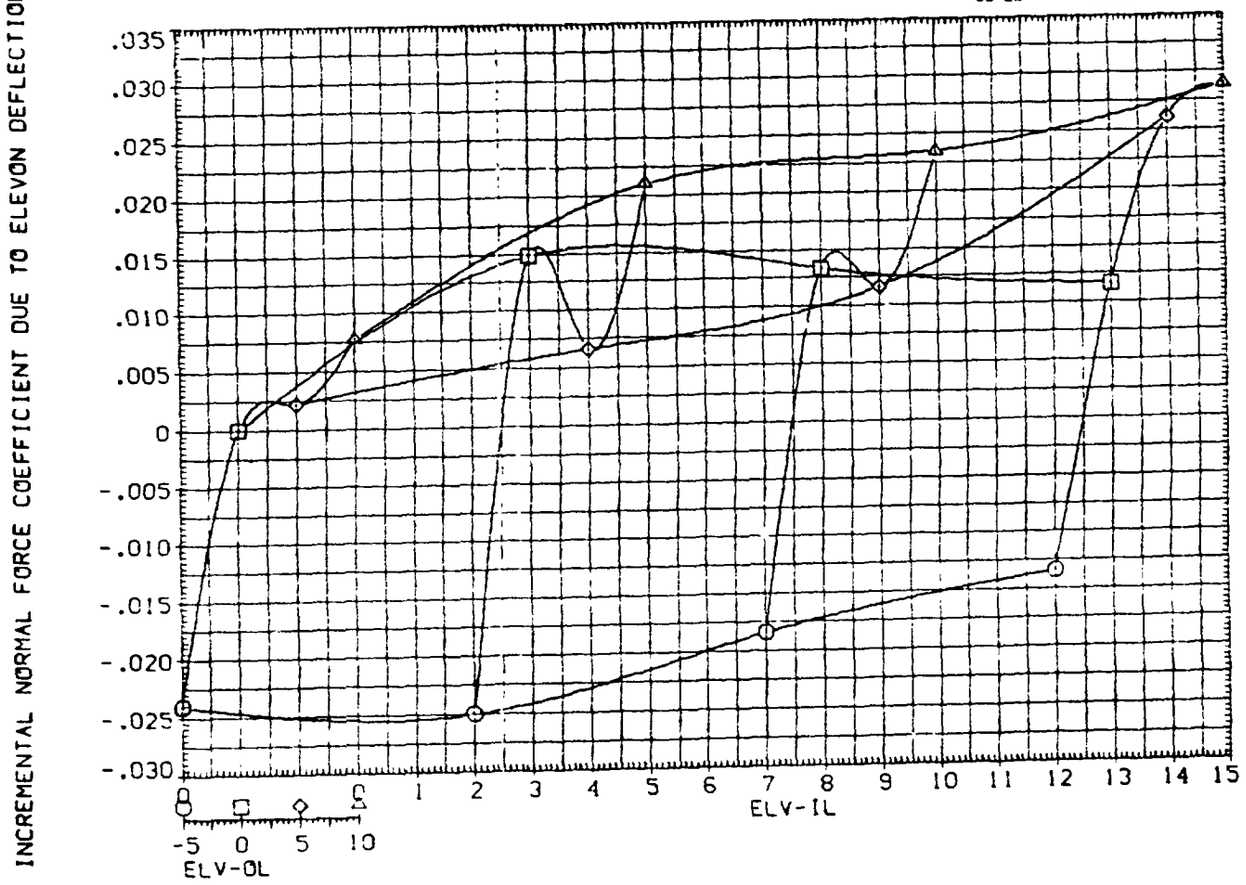
MSFC TWT 622 (:A125) 74 OTS. M= 1.2. ALPHA=-2.0 (BINESE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



EL 3N EFFECTIVENESS FOR MACH = 1.20

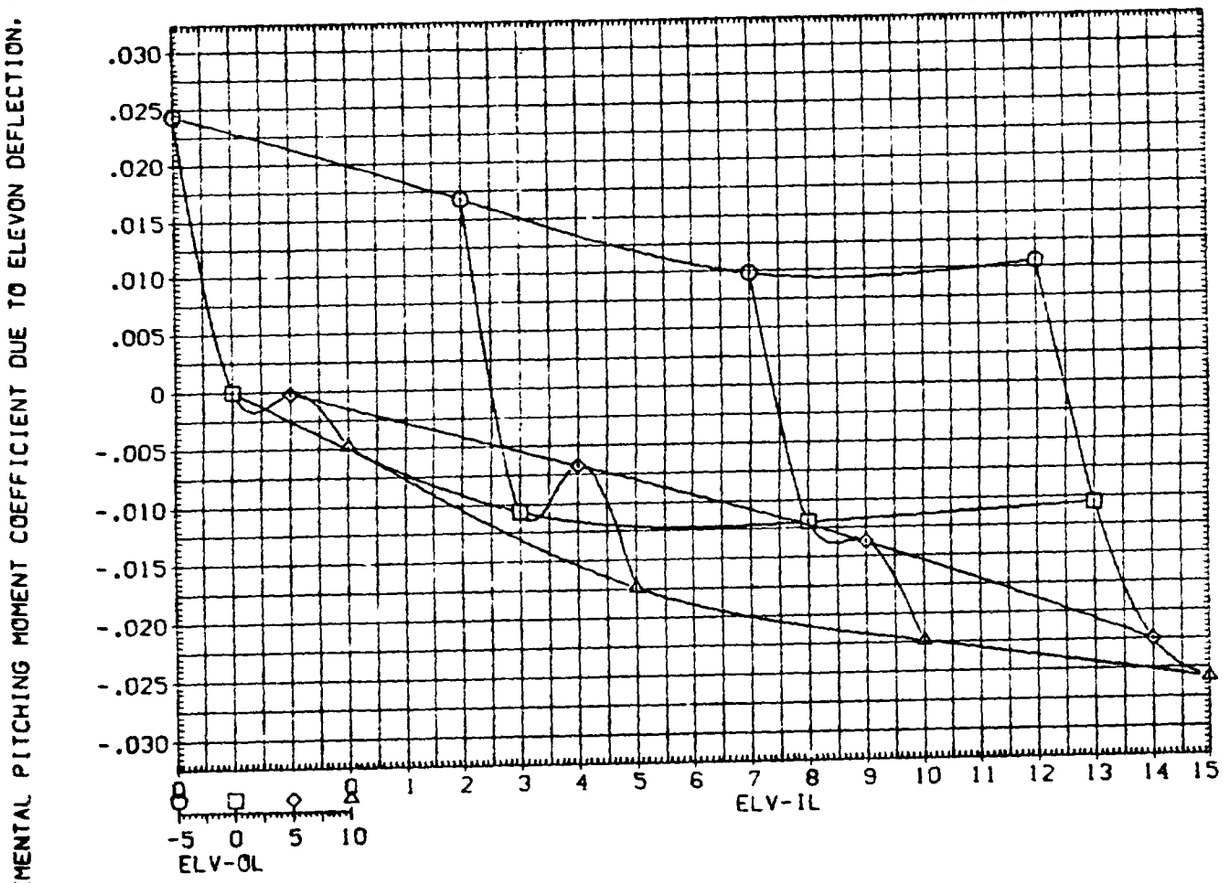
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-2.0 (BINESE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

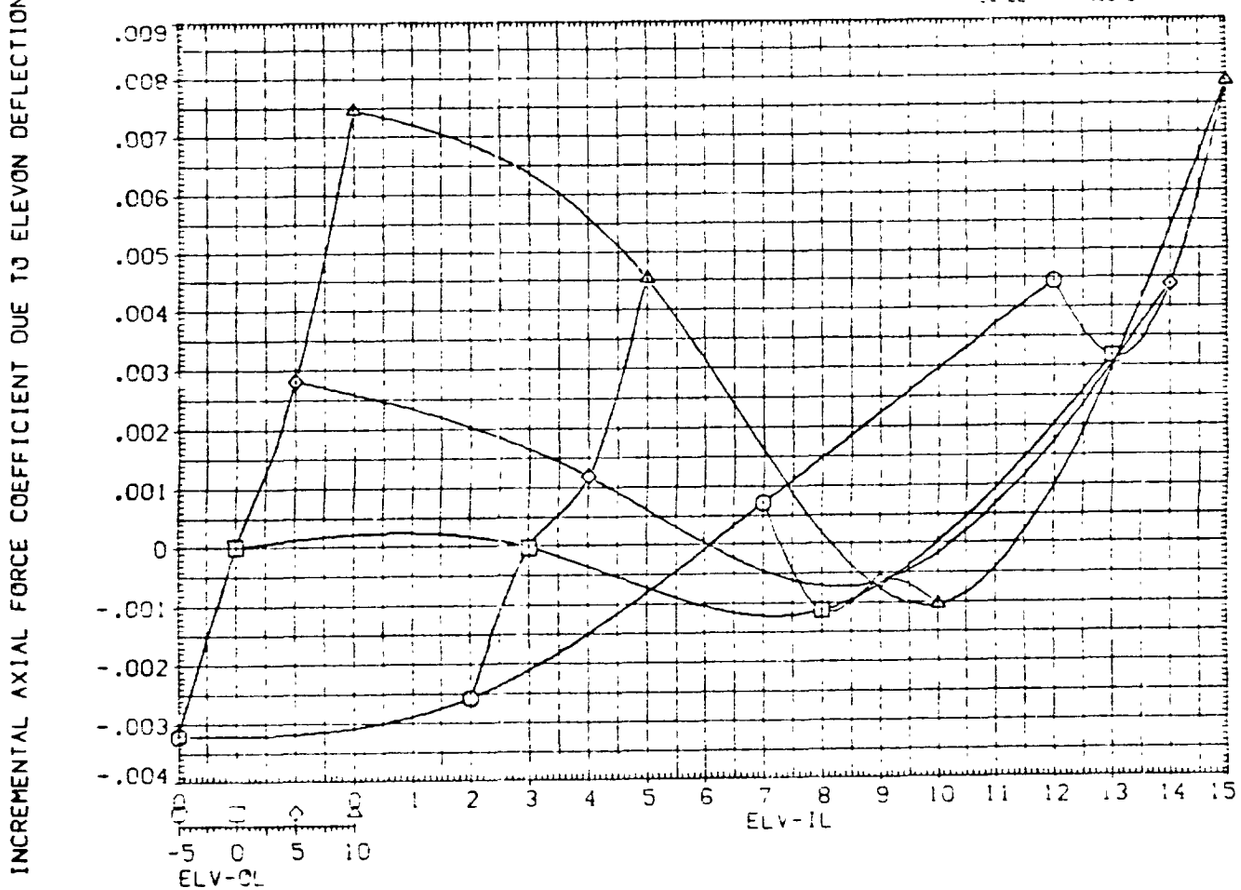
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-2.0 (BINESE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.200	ELV-IR	.000
ELV-OP	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. X
YMRP	.0000	IN. Y
ZMRP	400.0000	IN. Z
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

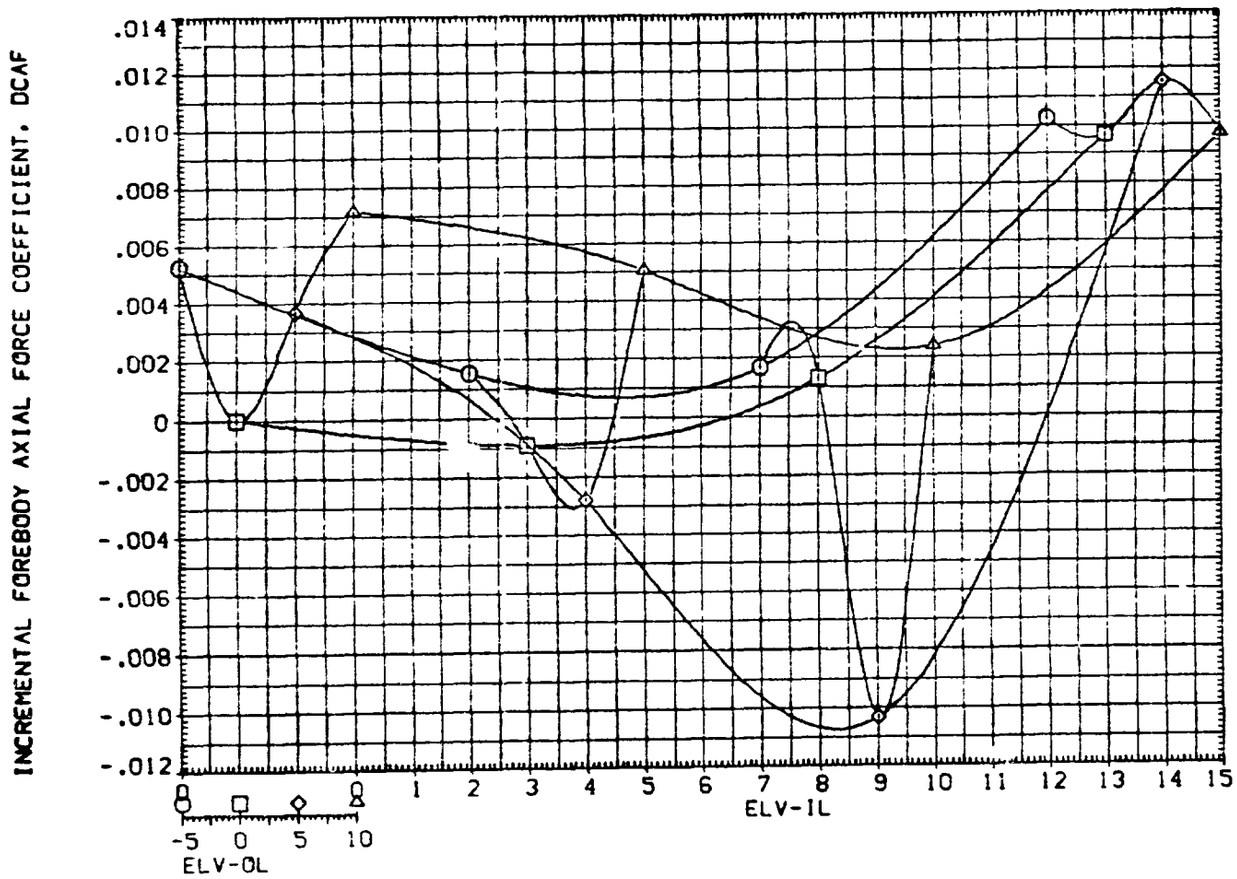
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-2.0 (BINESE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

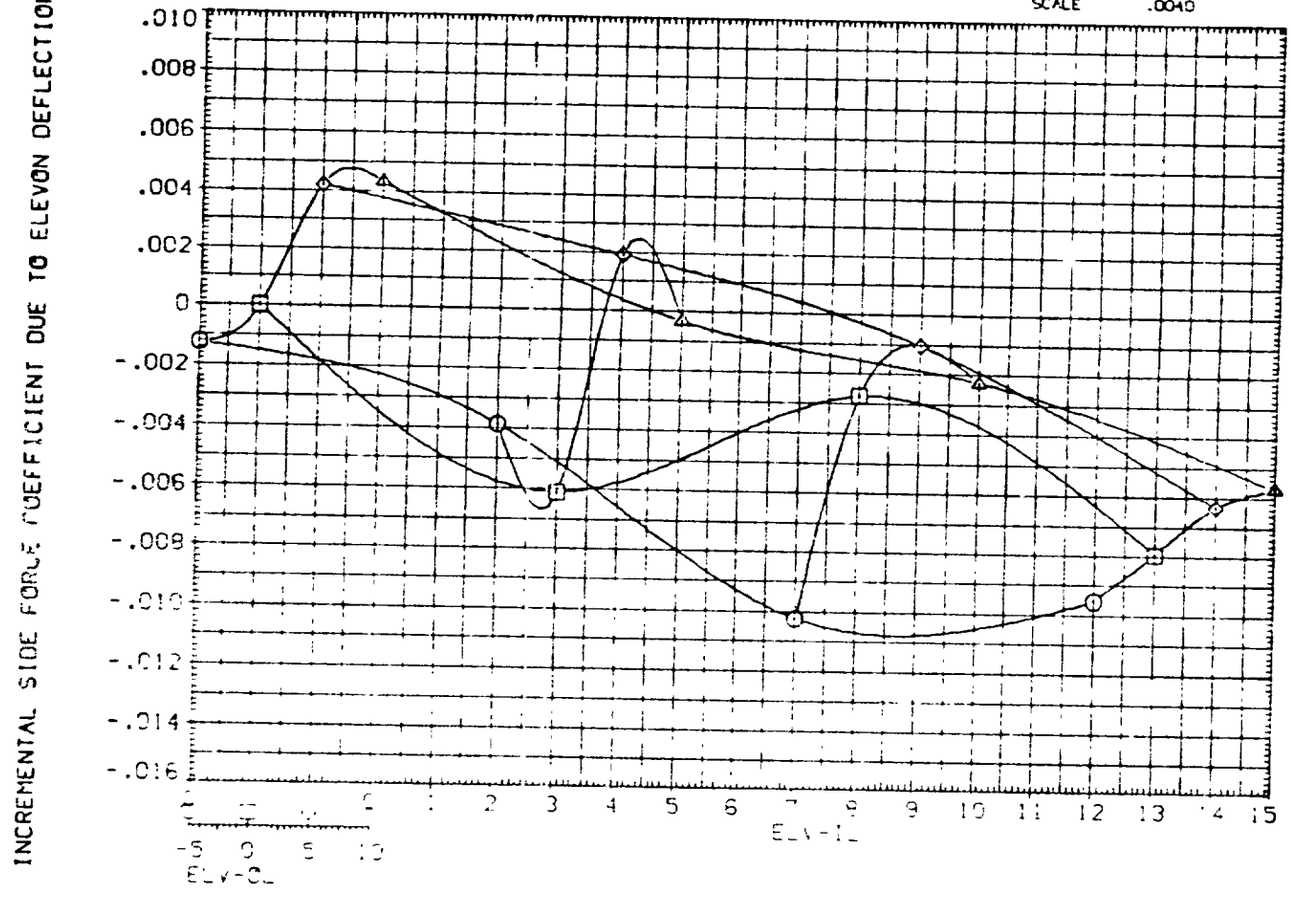
MSFC TWT 622 (IA125) 74 OTS. M= 1.2, ALPHA=-2.0 (BINESE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

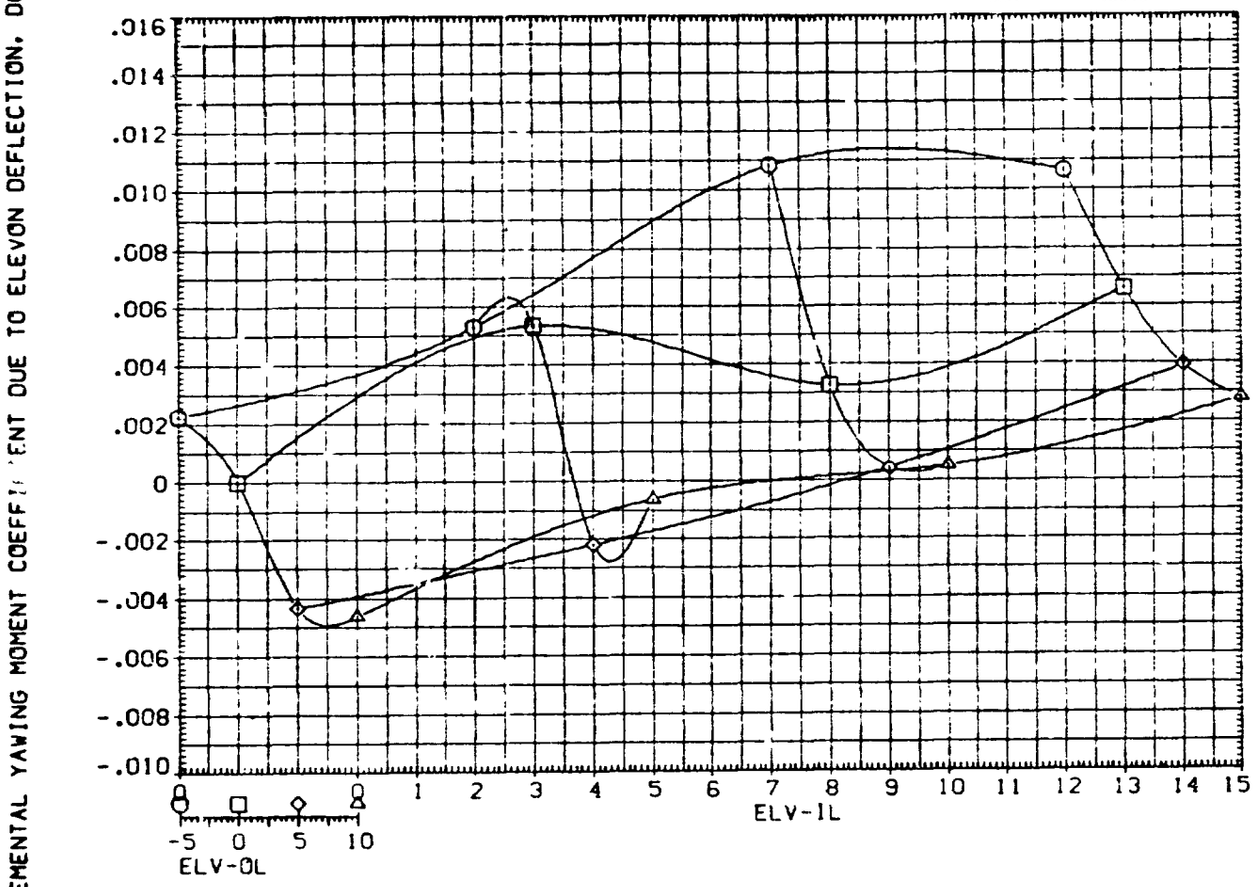
MSFC TWT 622 (IA125) 74 CTS. M= 1.2. ALPHA=-2.0 (BINESE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.200	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

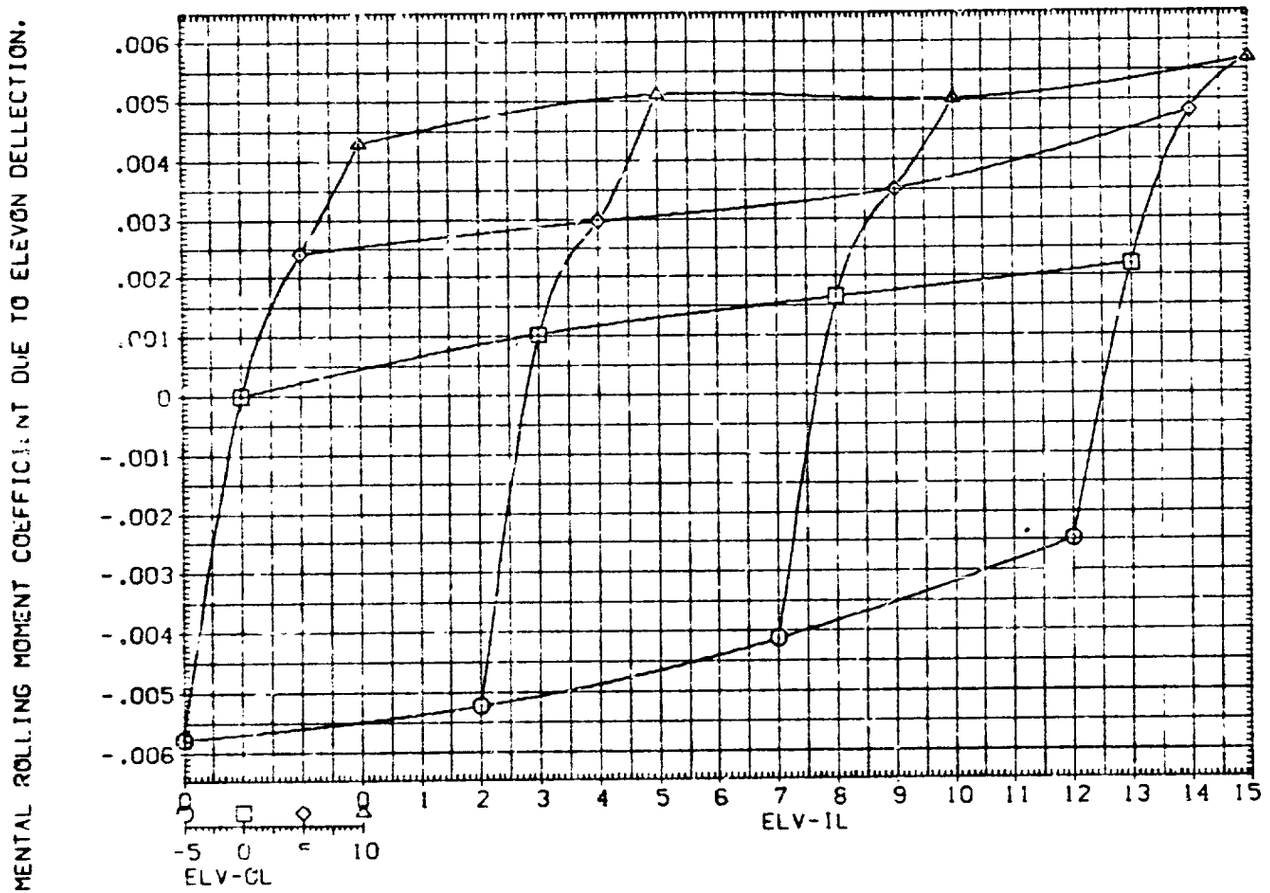
C TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA=-2.0 (BINESE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0010	



ELEVON EFFECTIVENESS FOR MACH = 1.20

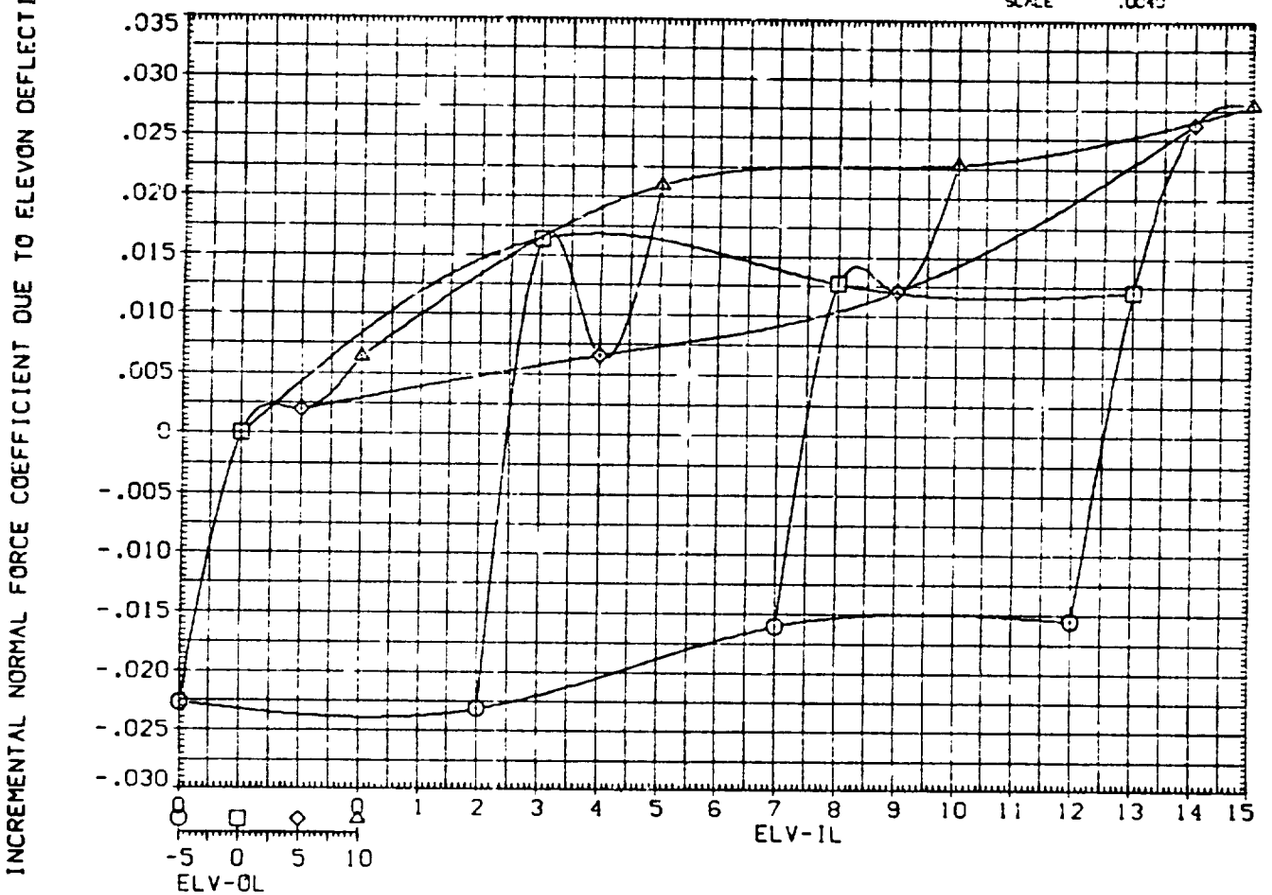
MSFC TWT 622 (IA!25) 74 OTS. M= 1.2. ALPHA= 0.0 (BINESF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

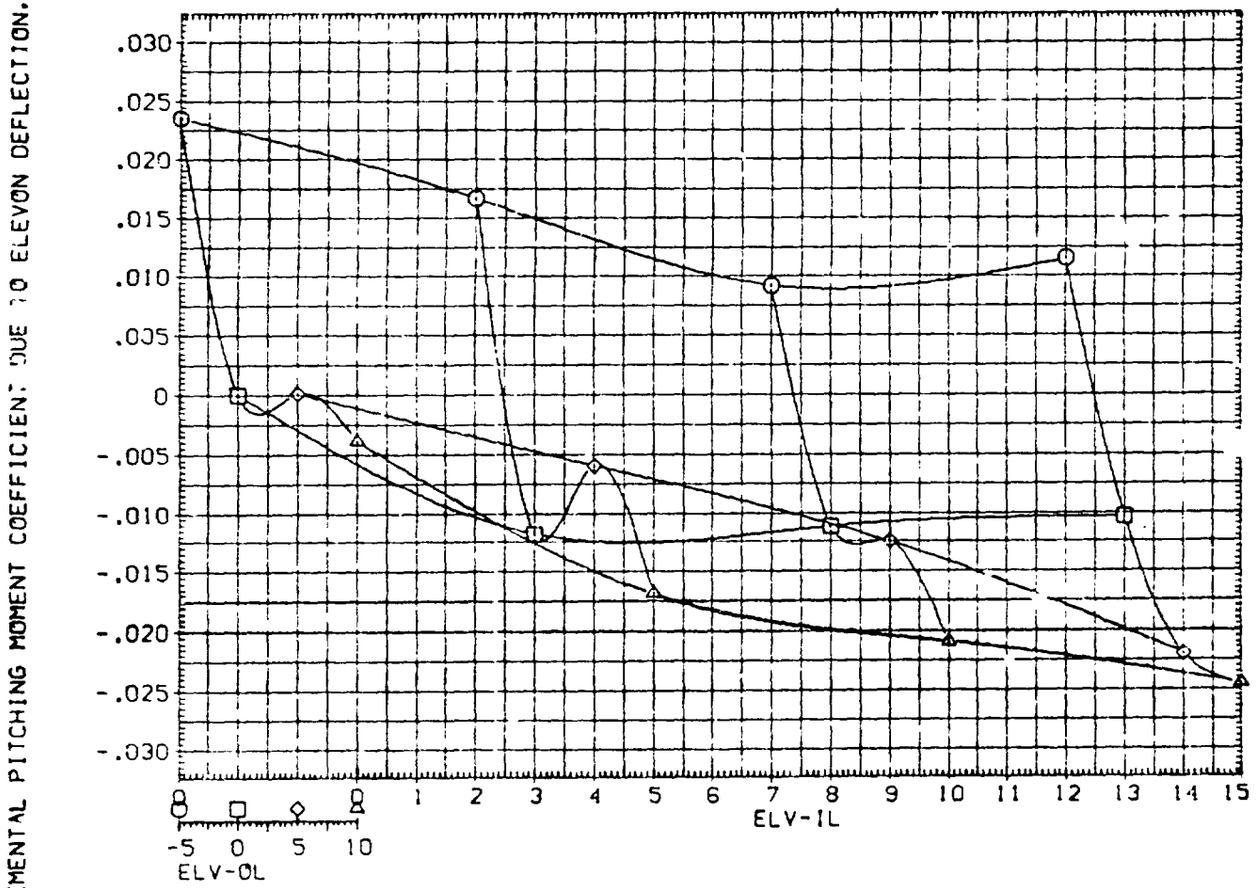
MSFC TWT 622 (IA125) 74 OTS. M= 1.2, ALPHA= 0.0 (BINESF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

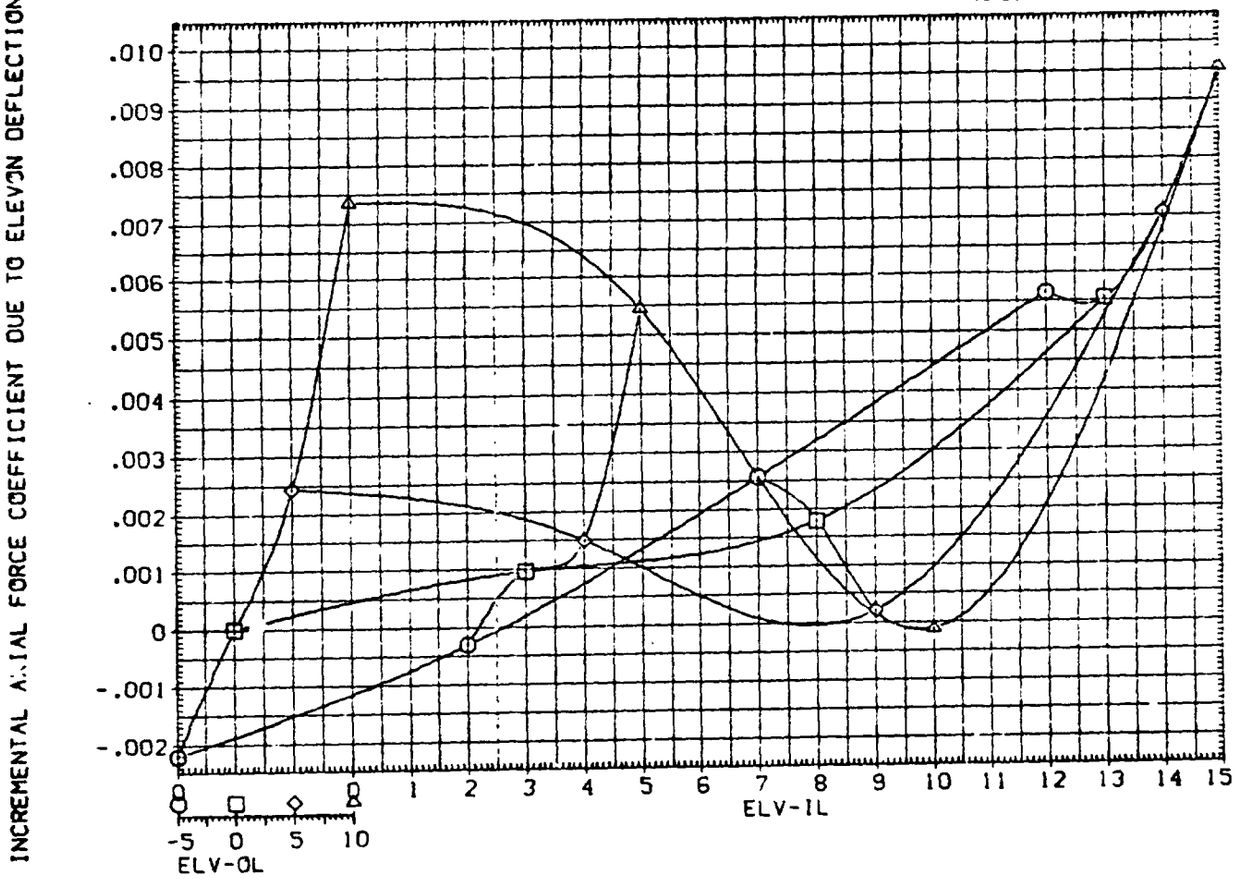
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 0.0 (BINESF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.200	ELV IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

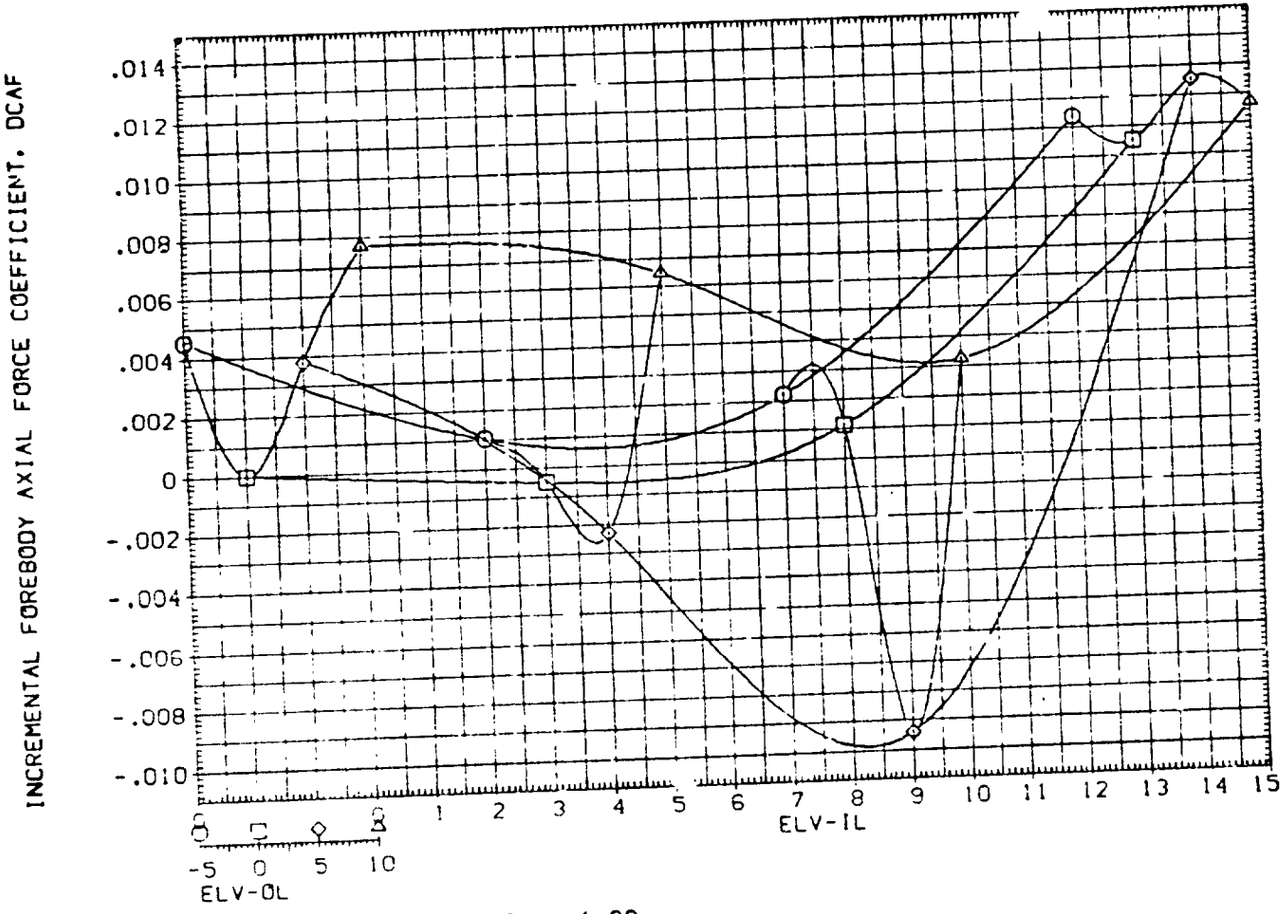
MSFC TWT 622 (IA125) 74 OTS. M= 1.2, ALPHA= 0.0 (BINESF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.200	ELV IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

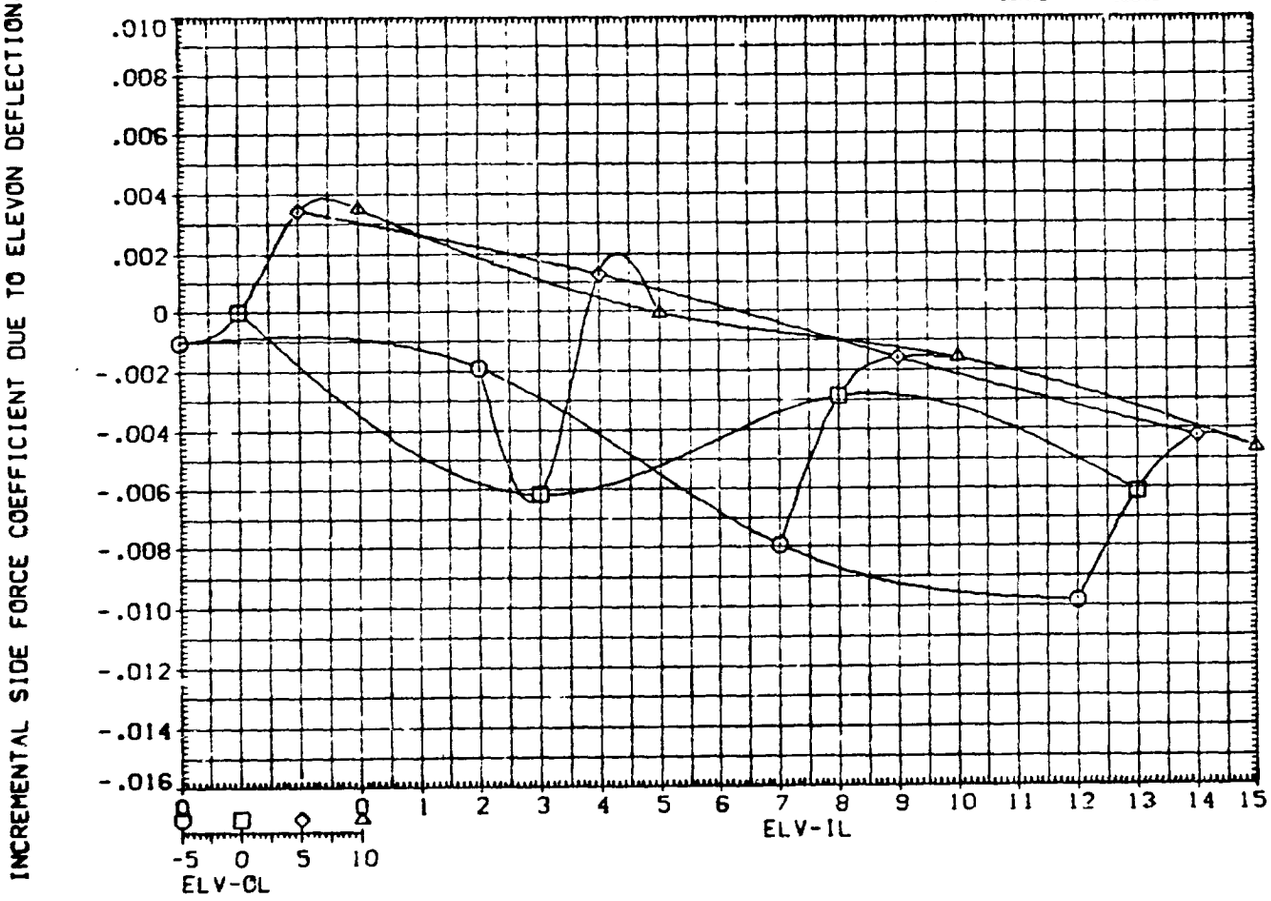
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 0.0 (BINESF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2600.0000	SQ. FT
LREF	1250.3000	INCHES
BREF	1250.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

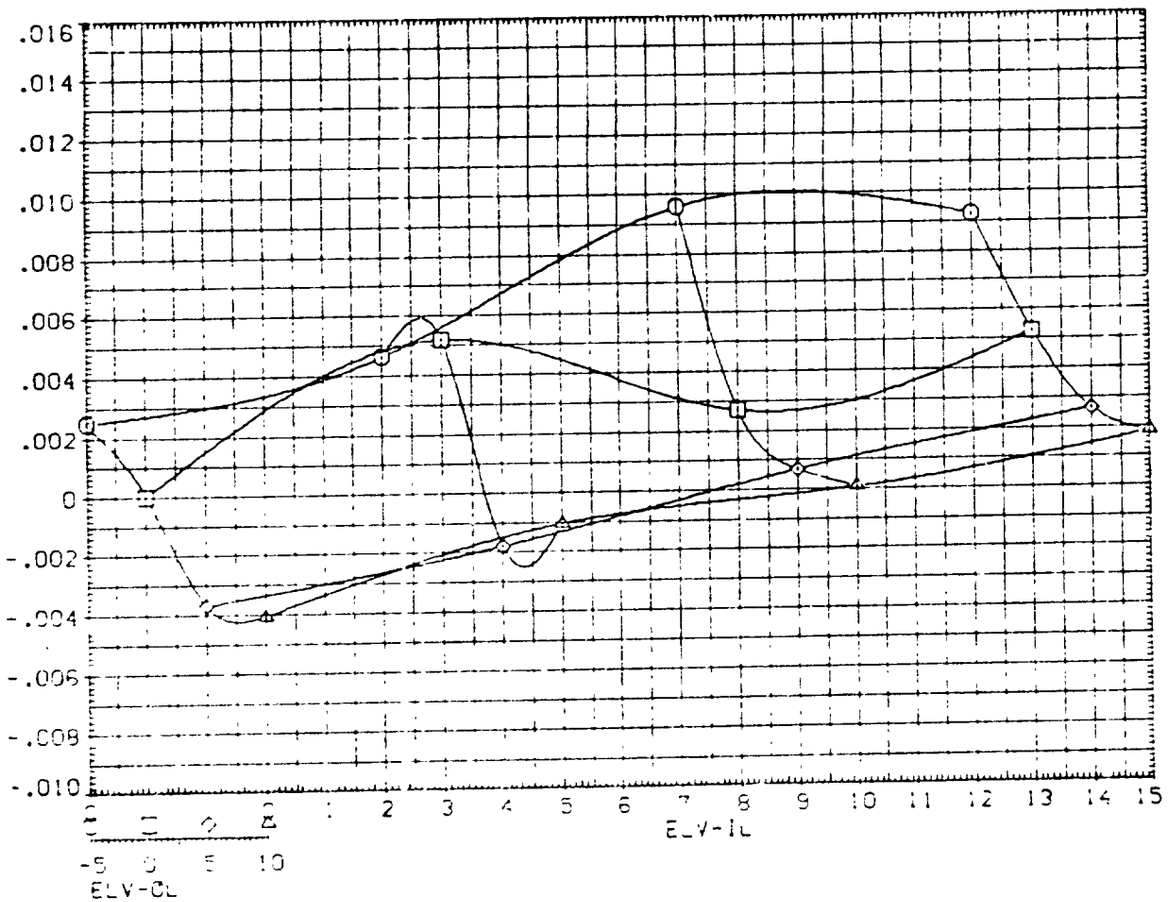
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 0.0 (BINESF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1260.0000	INCHES
BREF	1260.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	0.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	0.040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

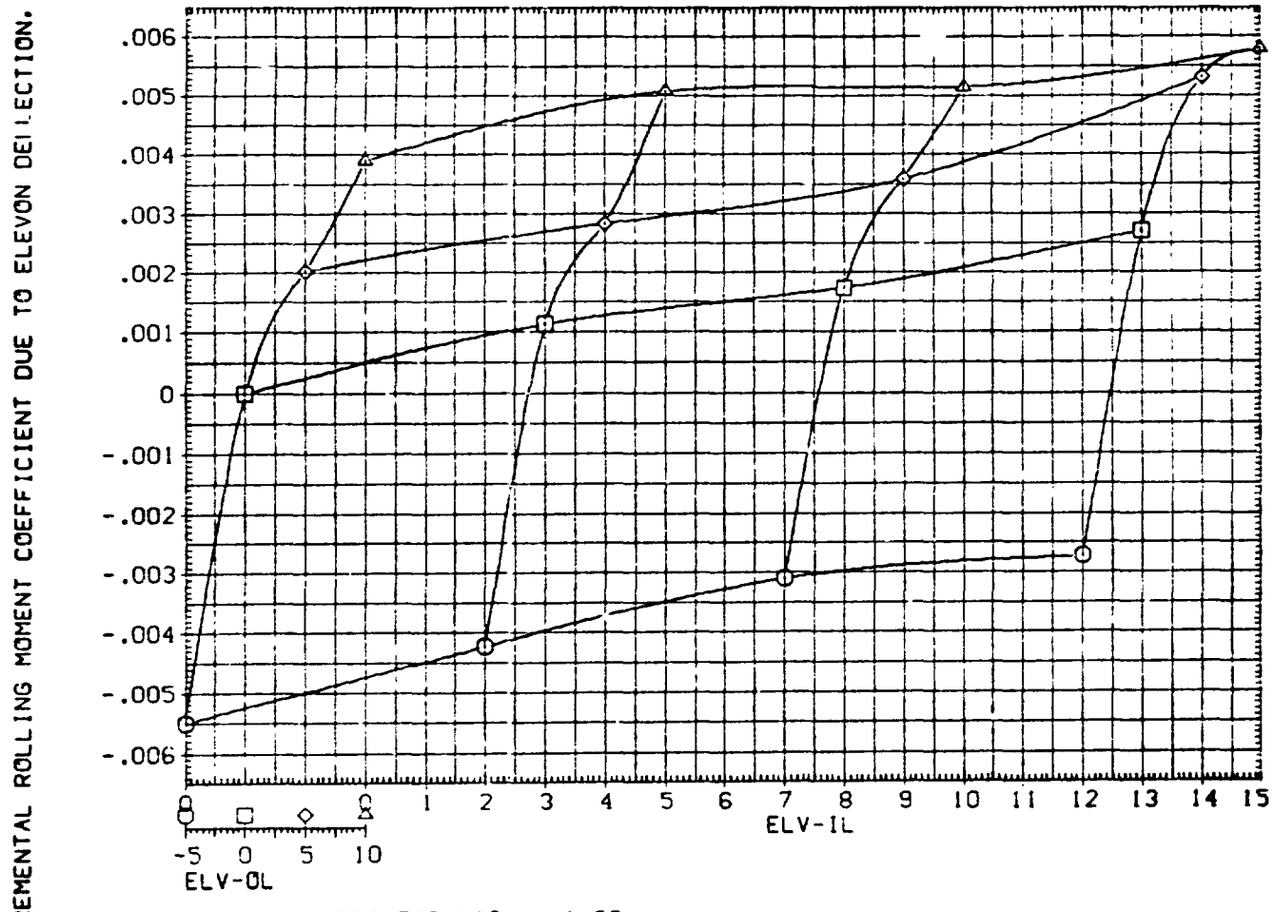
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 0.0 (BINESF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

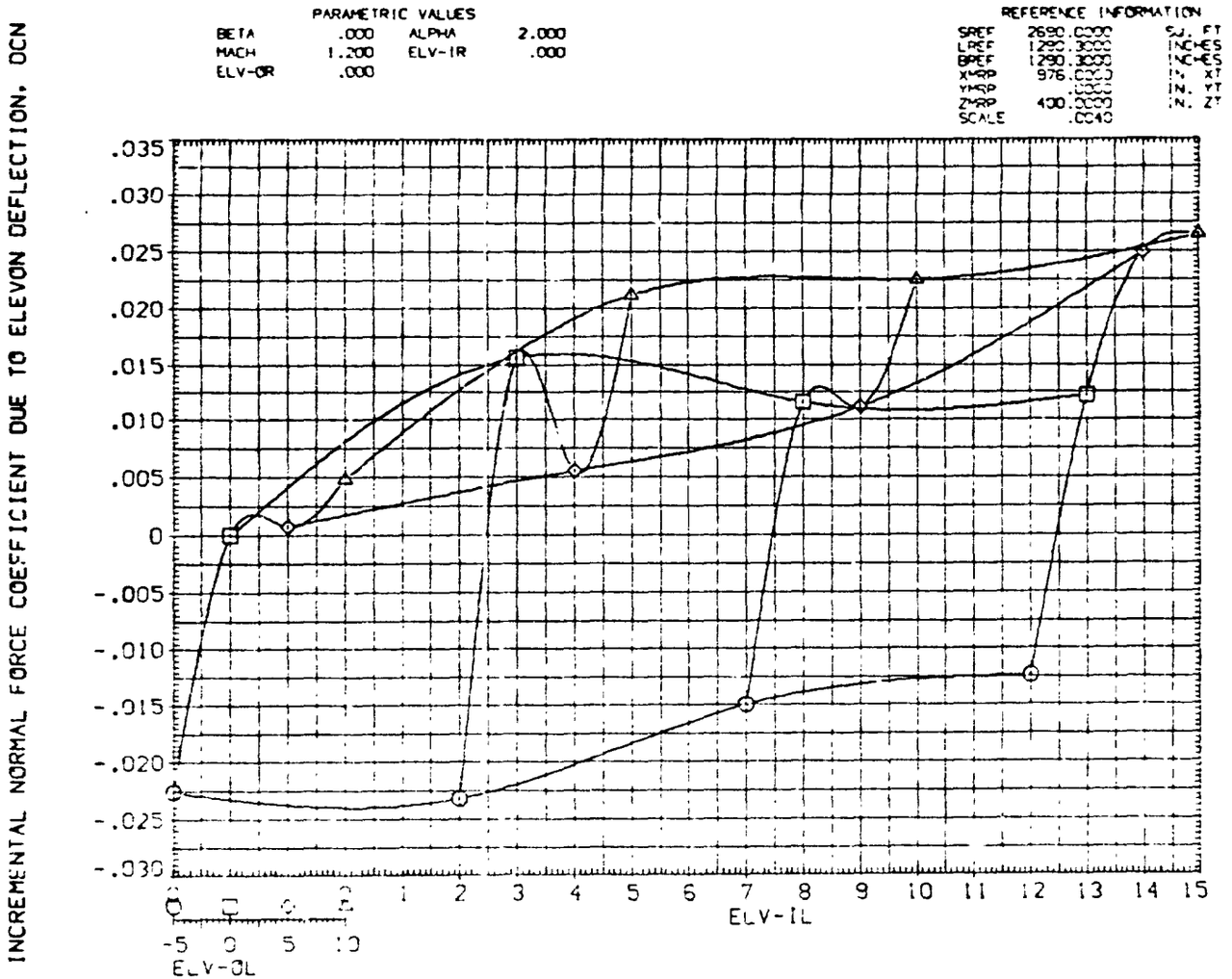
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 2.0 (BINESG)



ELEVON EFFECTIVENESS FOR MACH = 1.20

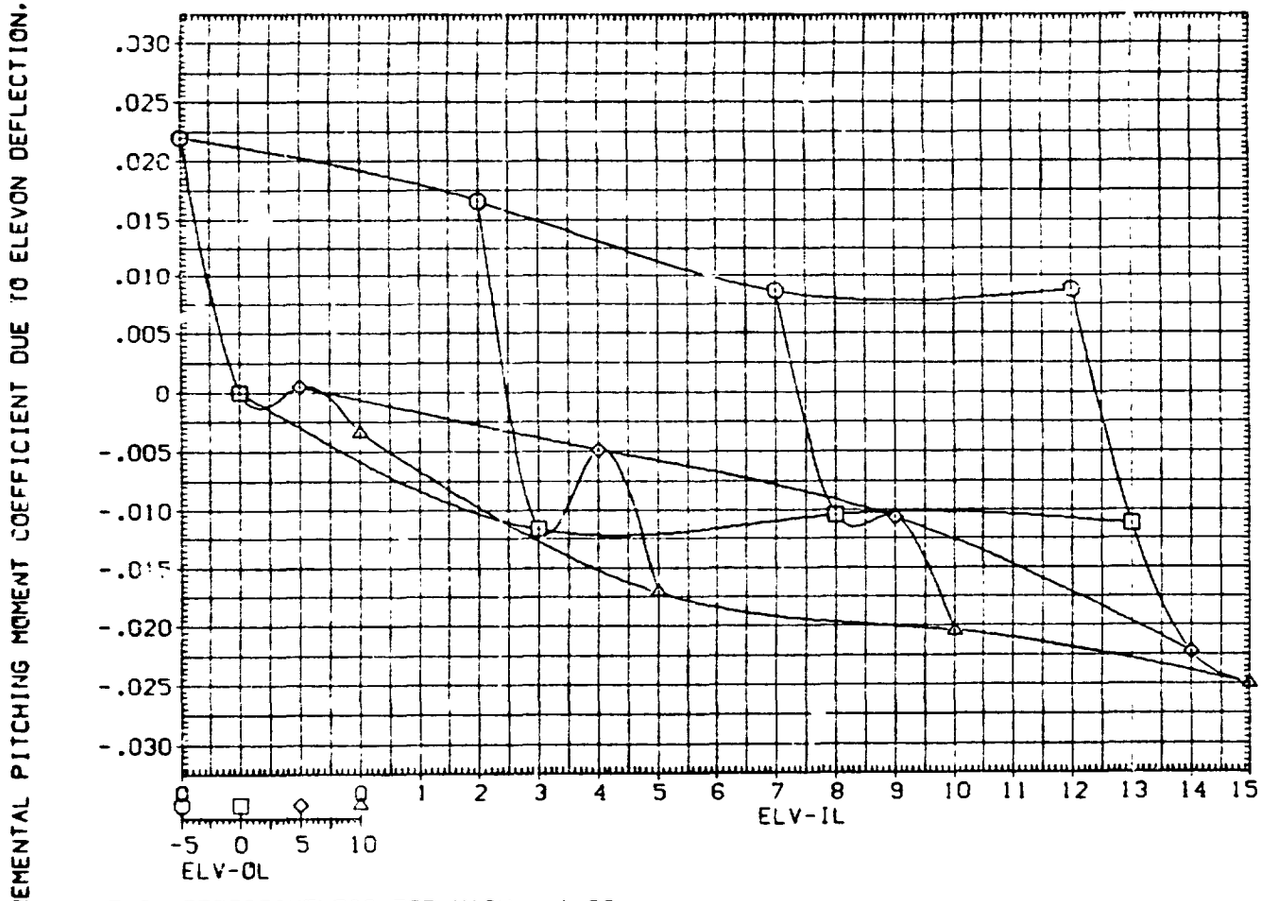
MSFC TWT 622 (IA125) 74 OTS. M= 1.2, ALPHA= 2.0 (BINESG)

PARAMETRIC VALUES

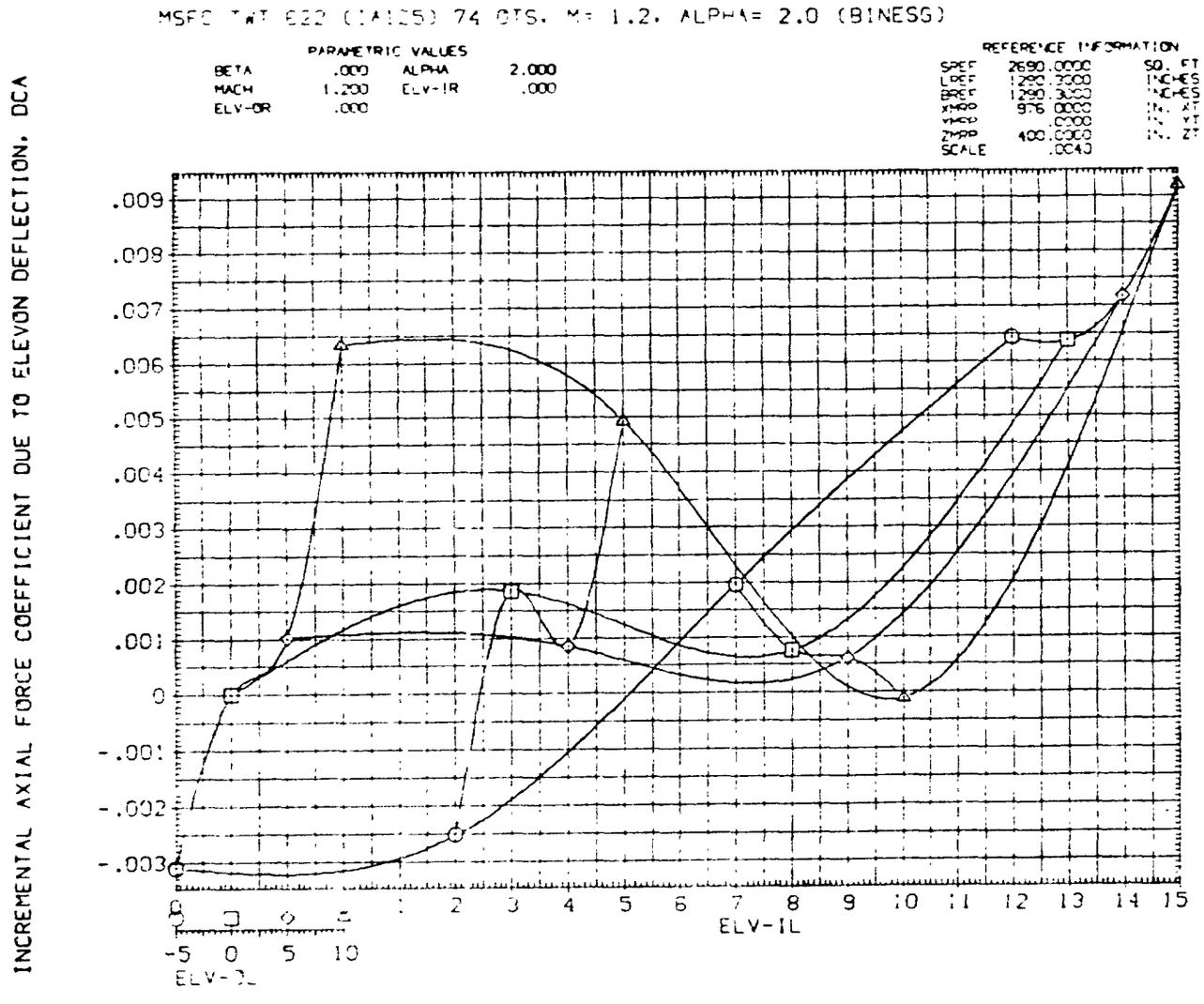
BETA	.000	ALPHA	2.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20



ELEVON EFFECTIVENESS FOR MACH = 1.20

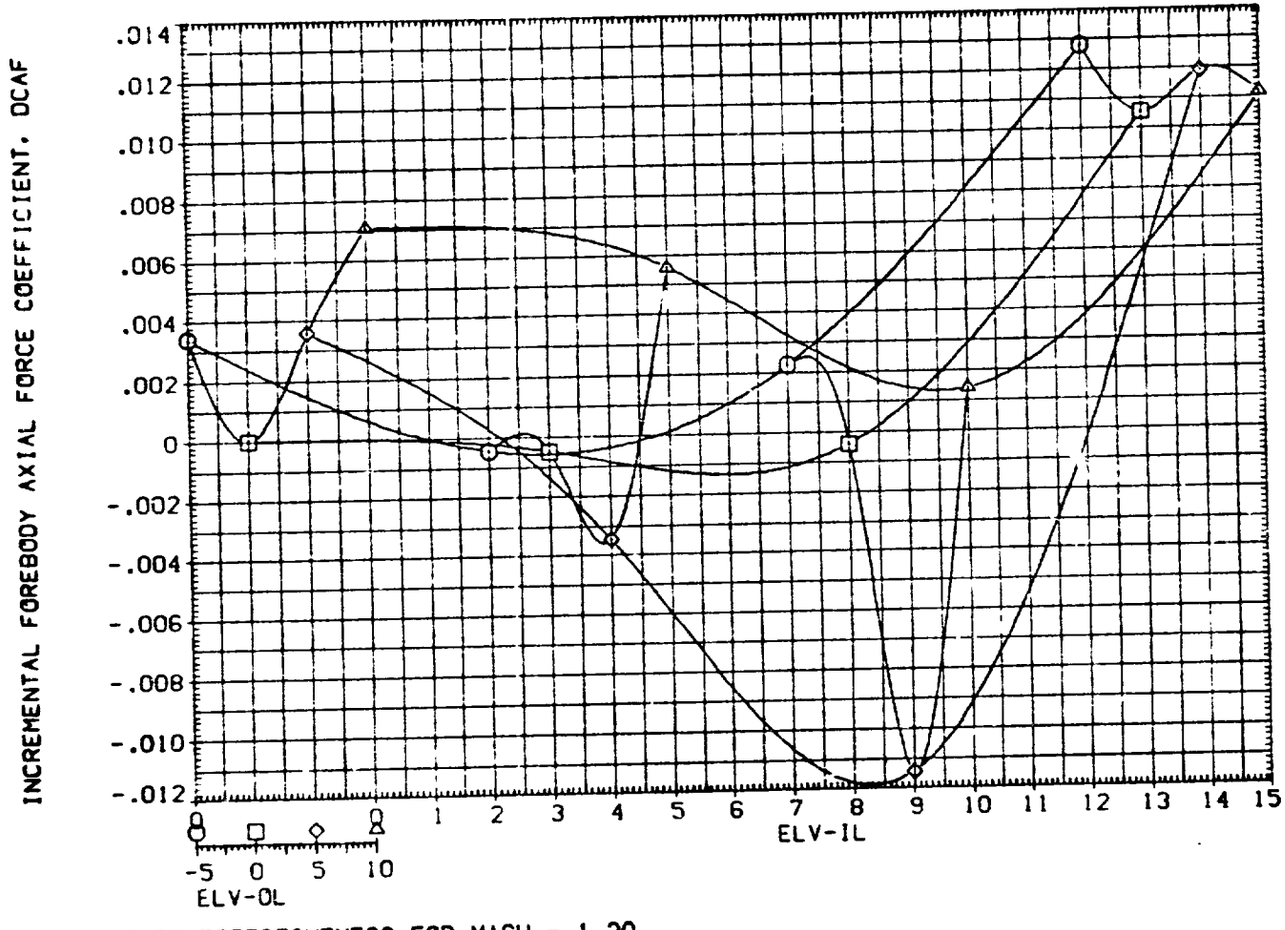
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 2.0 (BINESG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
LREF	1293.3000	INCHES
BREF	1293.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

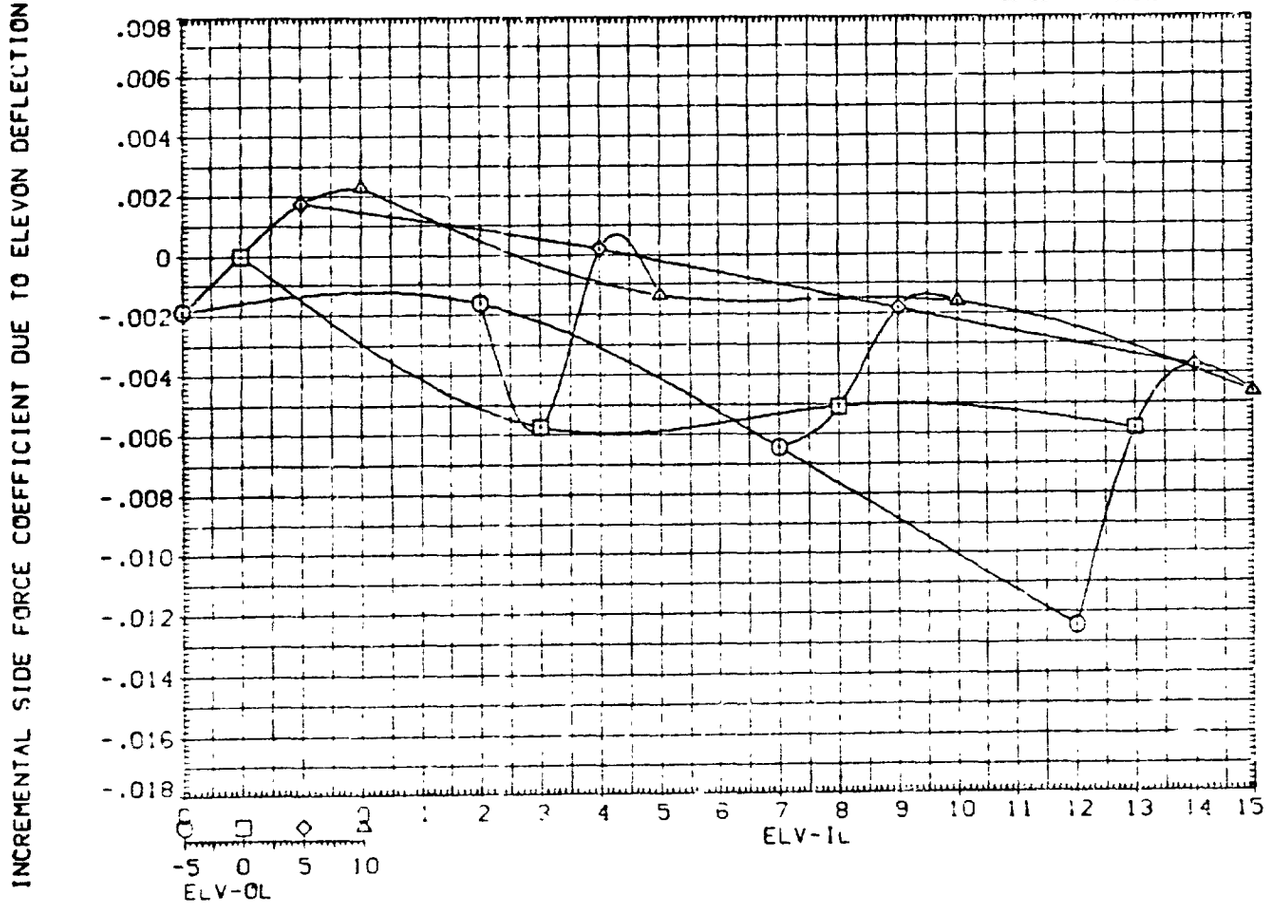
MSFC TWT 622 (IA125) 74 OTS. M= 1.2, ALPHA= 2.0 (BINESG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	[illegible]	[illegible]
BREF	[illegible]	[illegible]
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

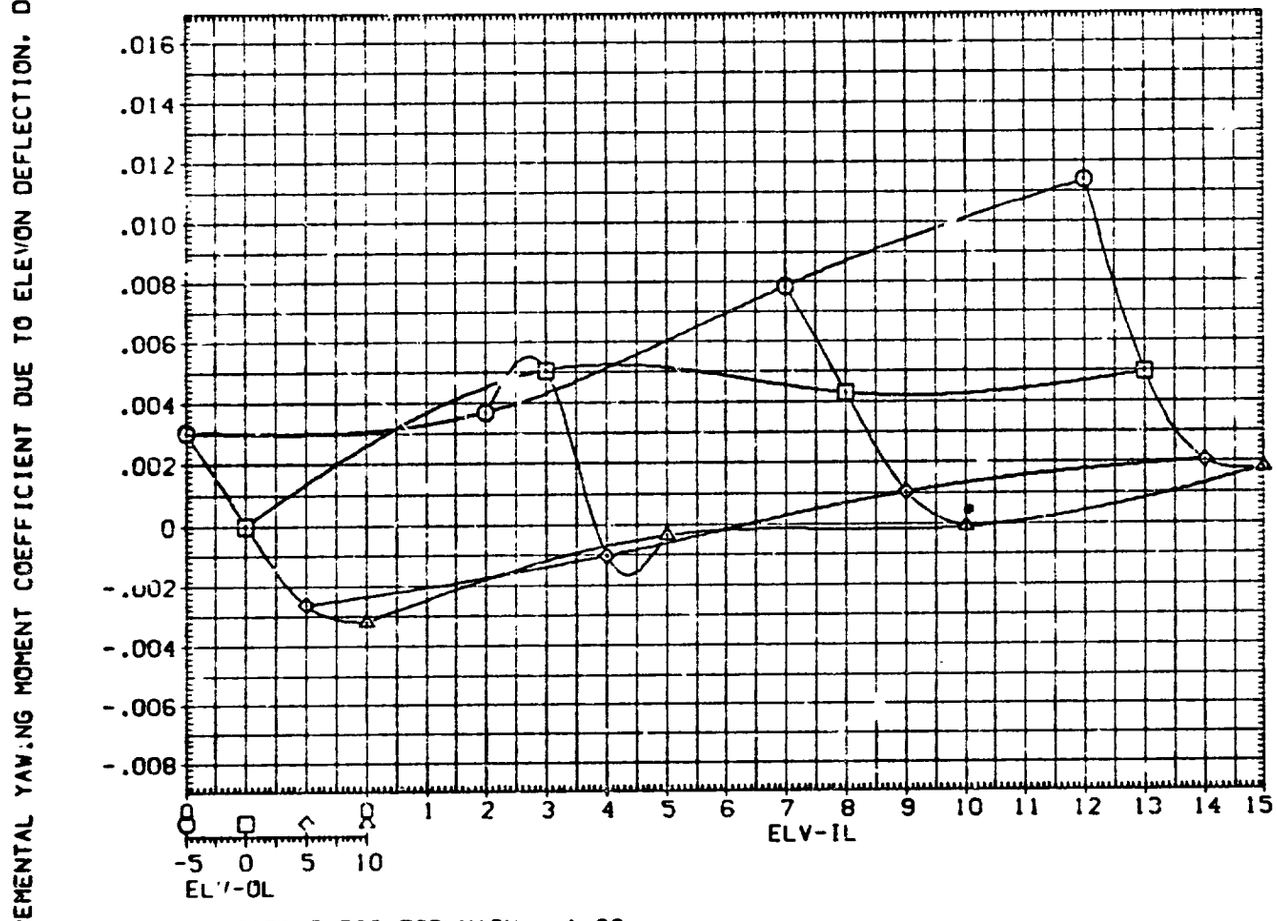
MSFC TWT 622 (IA125) 74 OTS, M= 1.2, ALPHA= 2.0 (BINESG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

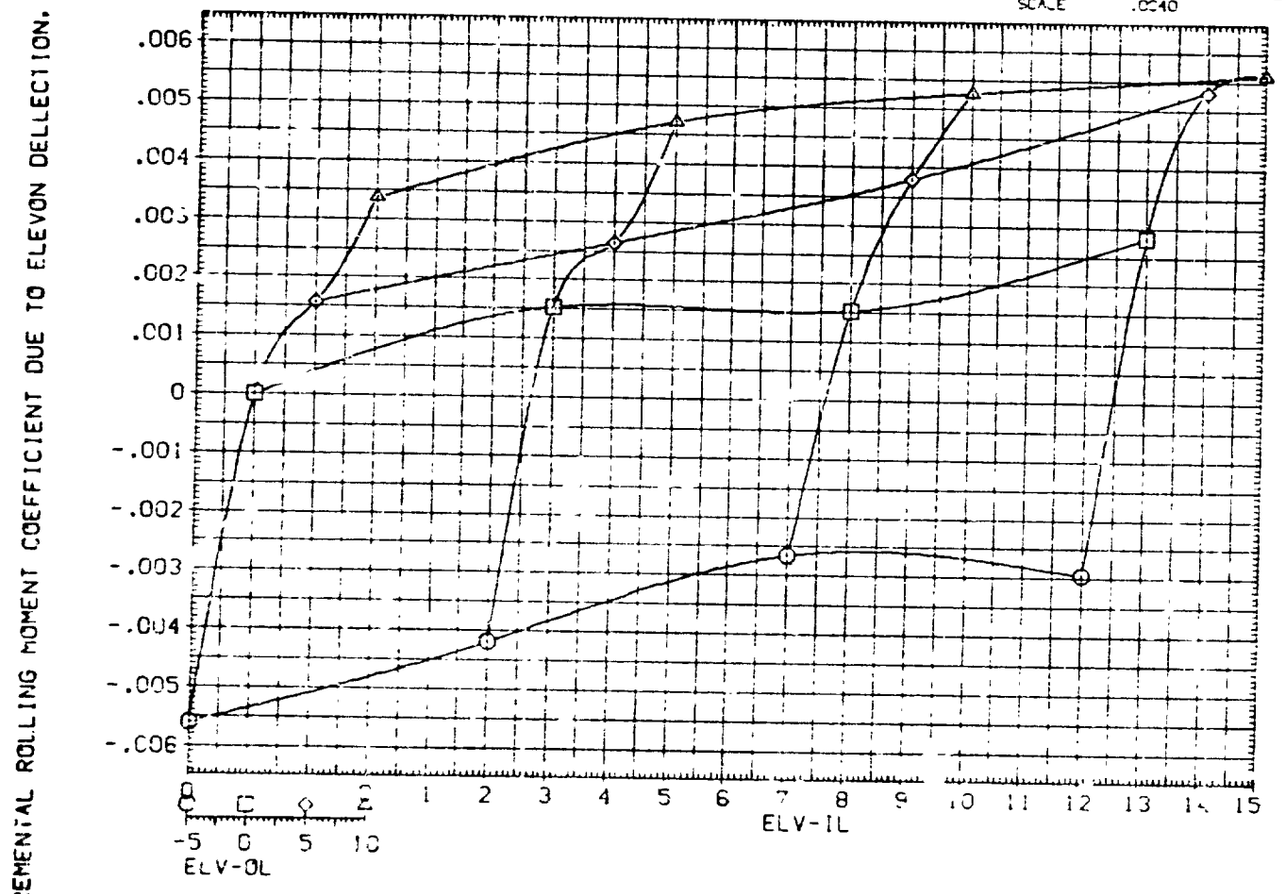
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 2.0 (BINESG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0240	



ELEVON EFFECTIVENESS FOR MACH = 1.20

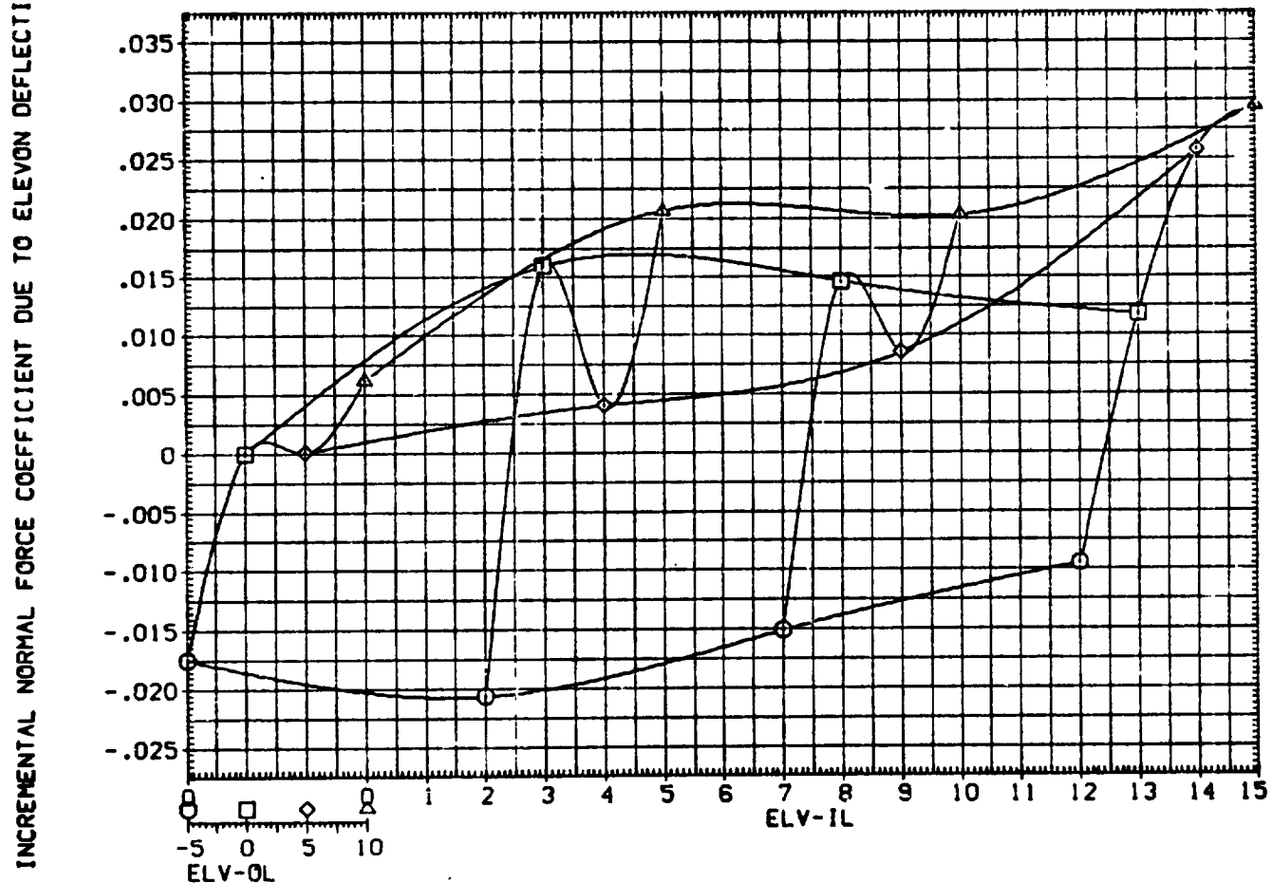
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 4.0 (BINESH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0240	



ELEVON EFFECTIVENESS FOR MACH = 1.20

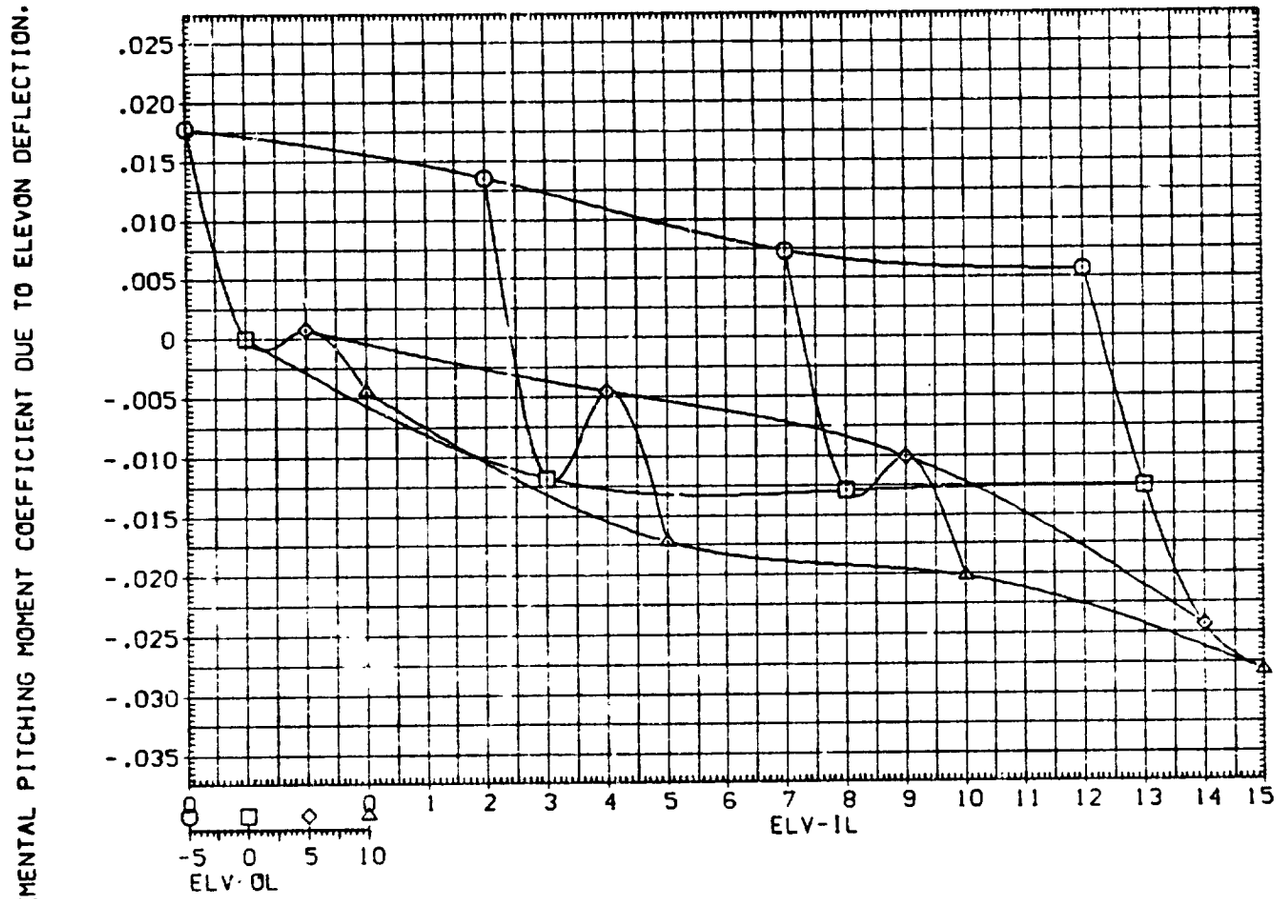
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 4.0 (BINESH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	[illegible]	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

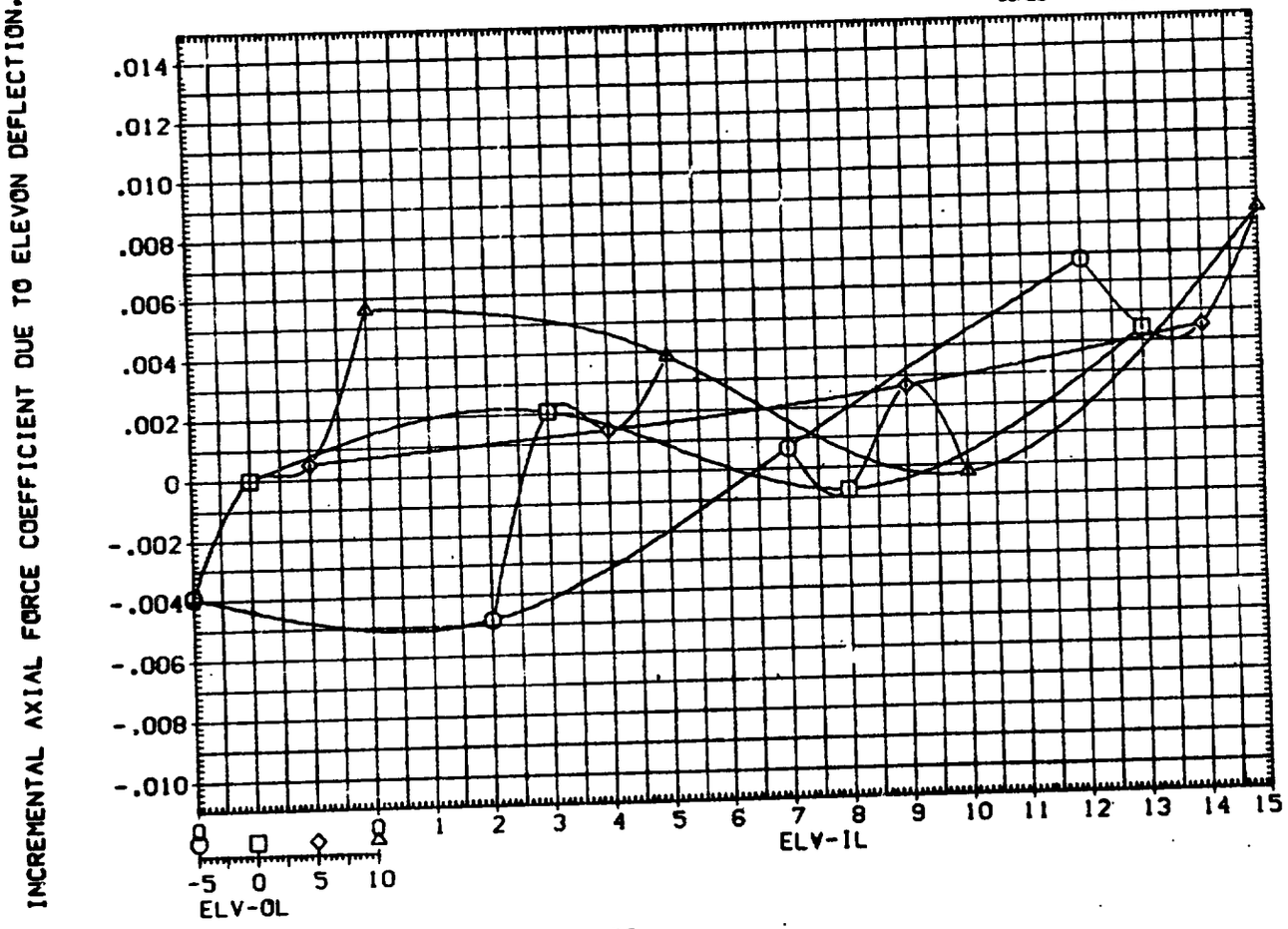
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 4.0 (BINESH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

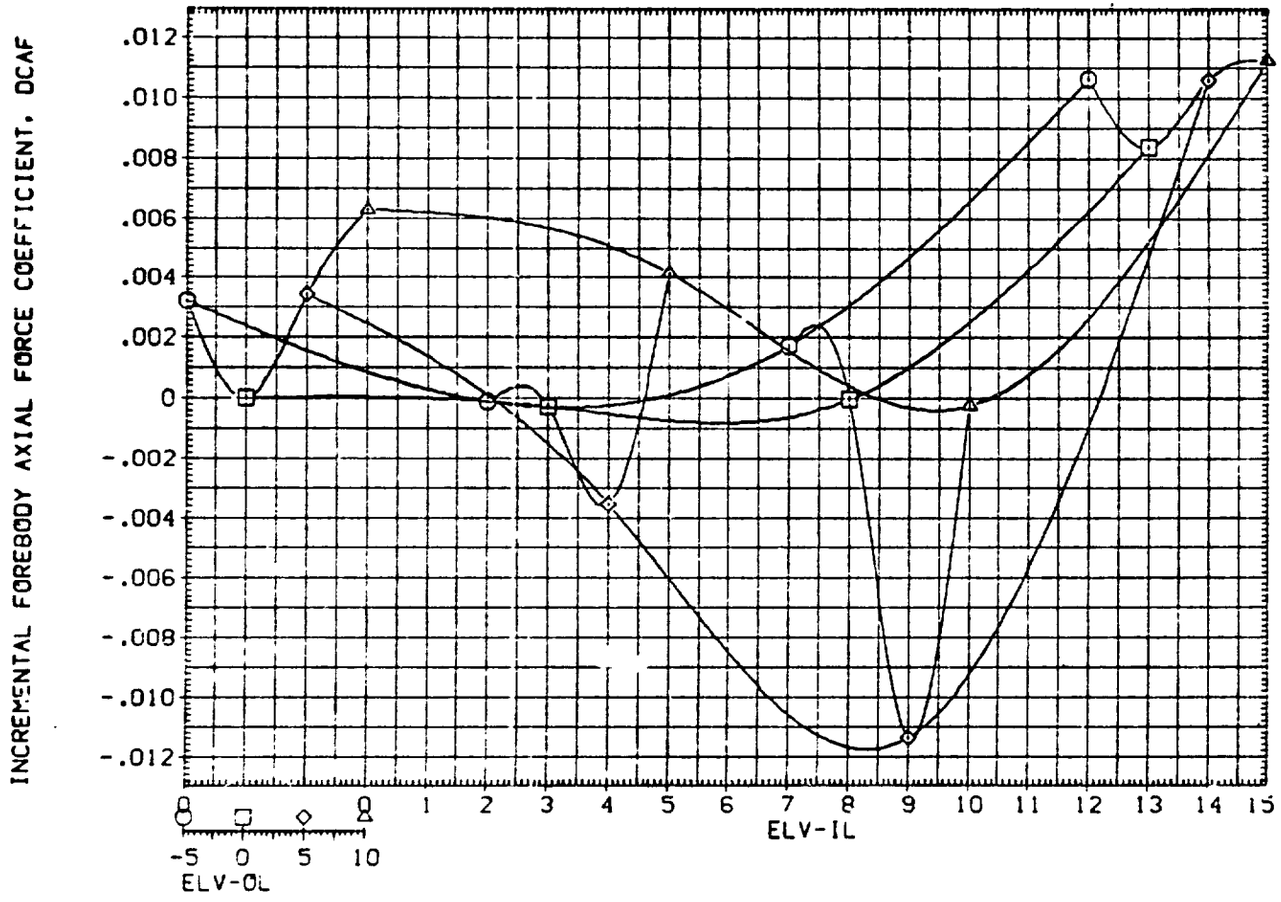
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 4.0 (BINESH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

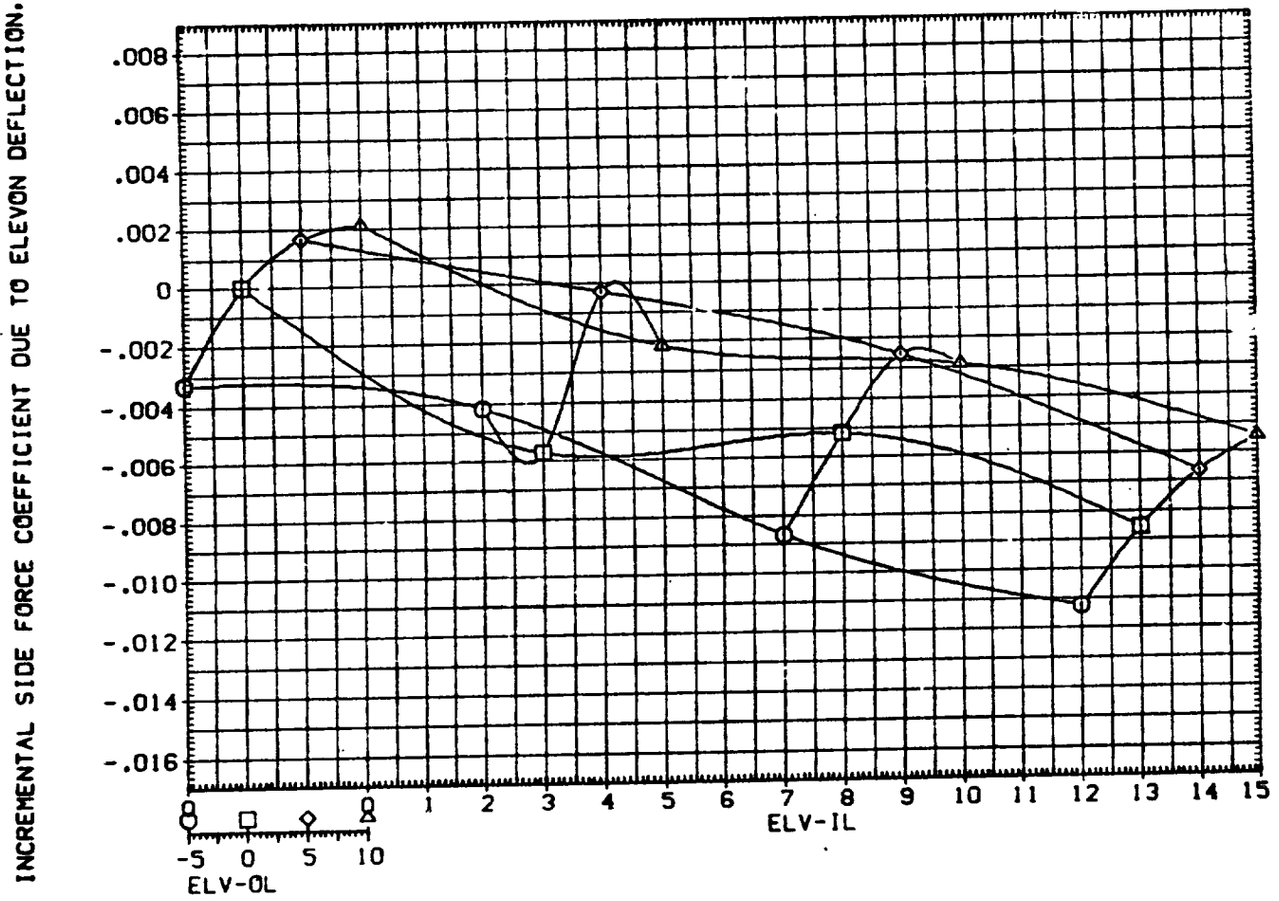
MSFC TWT 622 (IA125) 74 OTS. M= 1.2, ALPHA= 4.0 (BINESH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

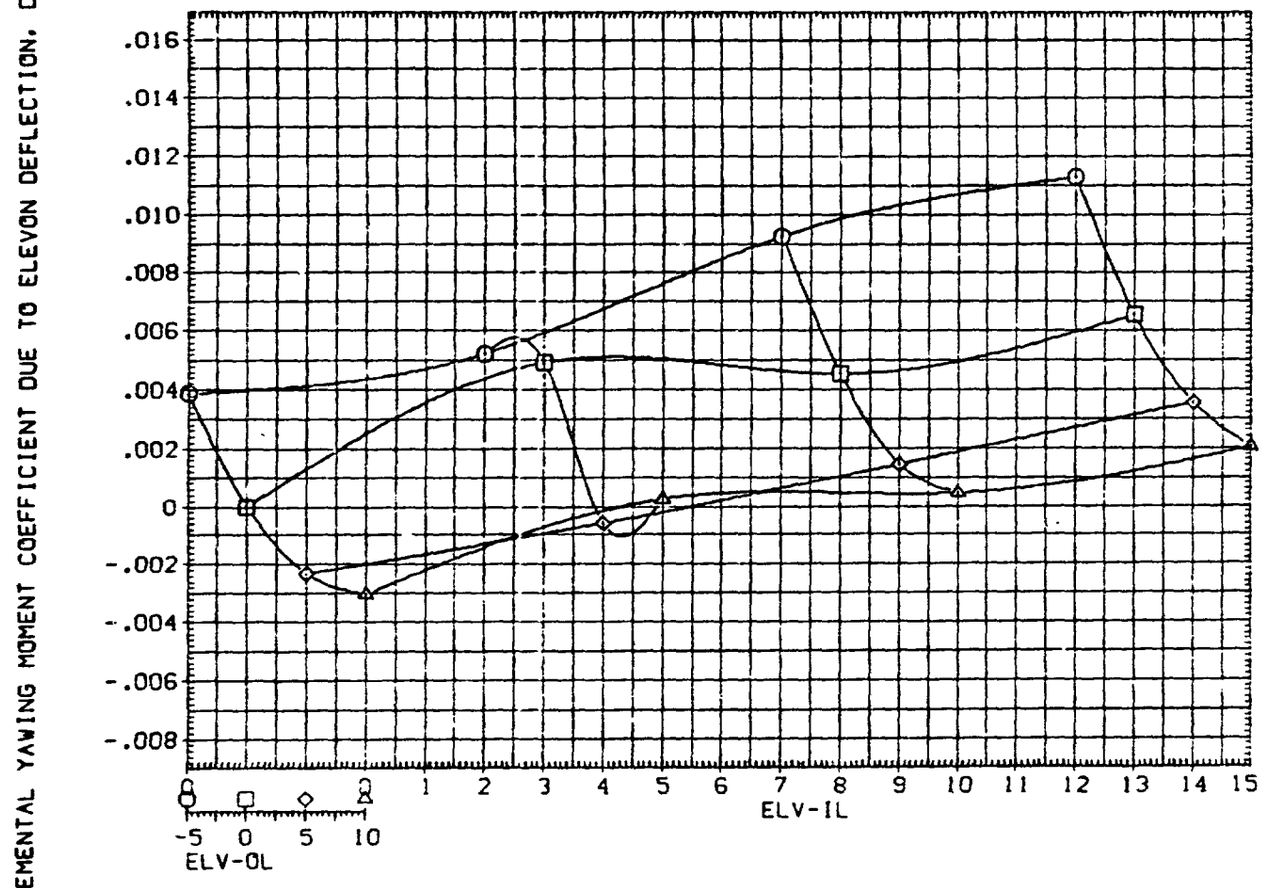
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 4.0 (BINESH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0043	



ELEVON EFFECTIVENESS FOR MACH = 1.20

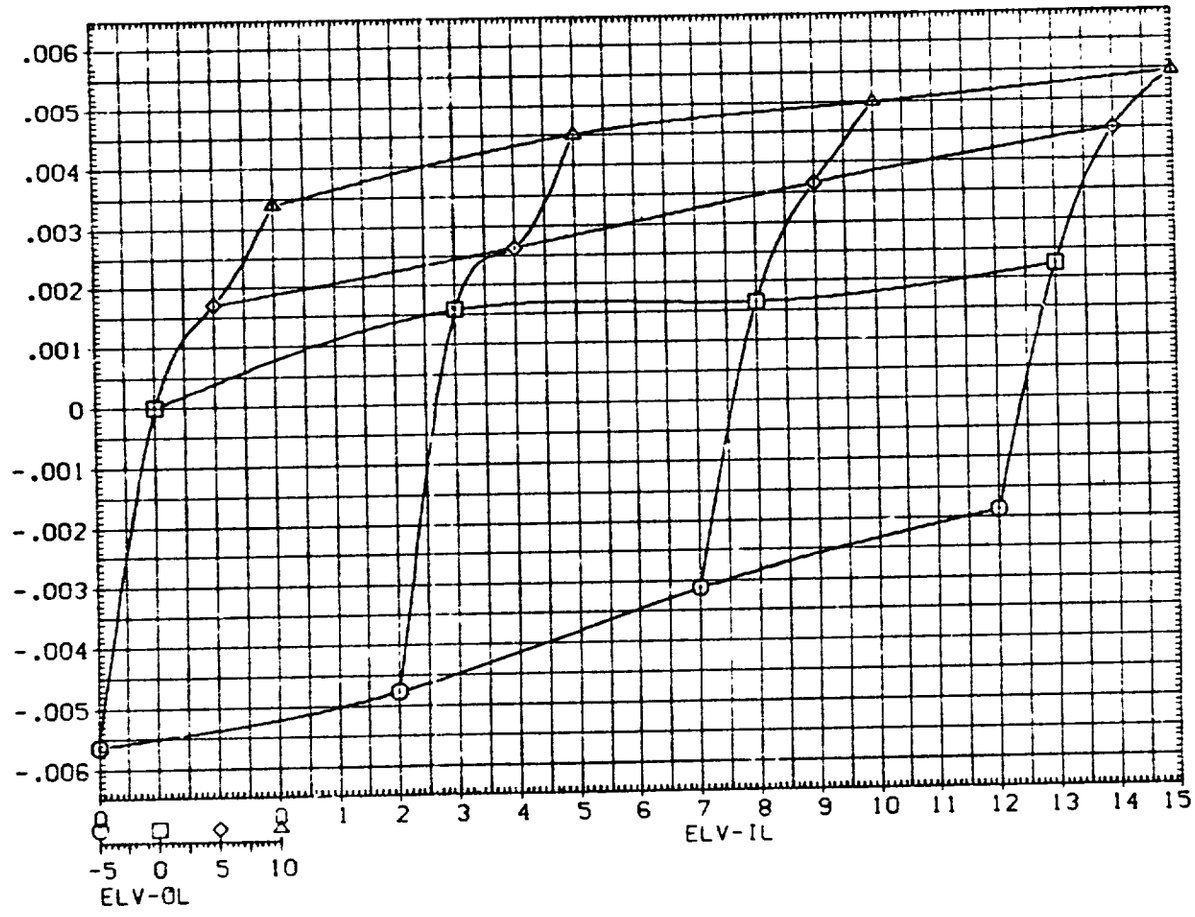
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 4.0 (BINESH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

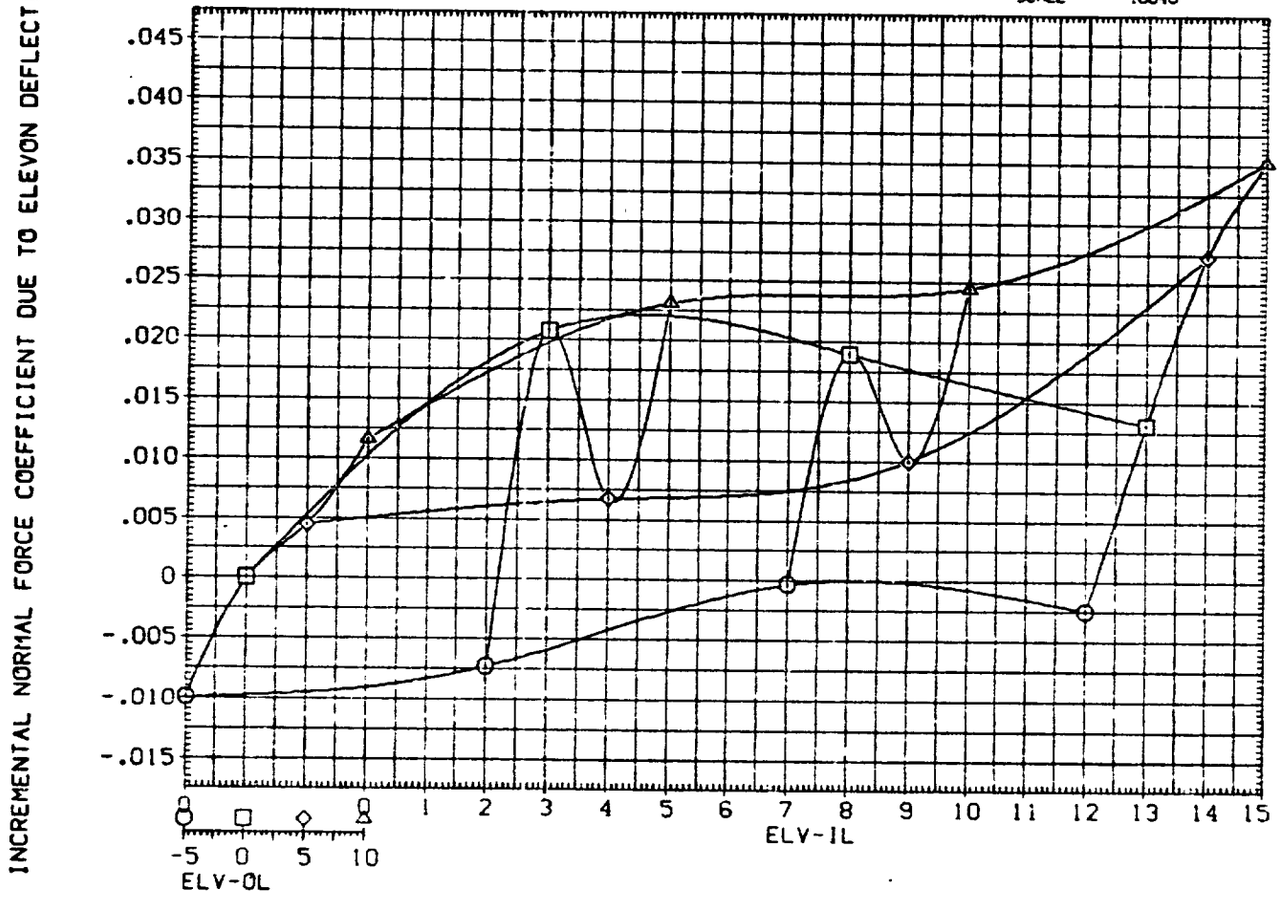
MSFC TWT 622 (IA125) 74 OTS. M= 1.2, ALPHA= 6.0 (BINESI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

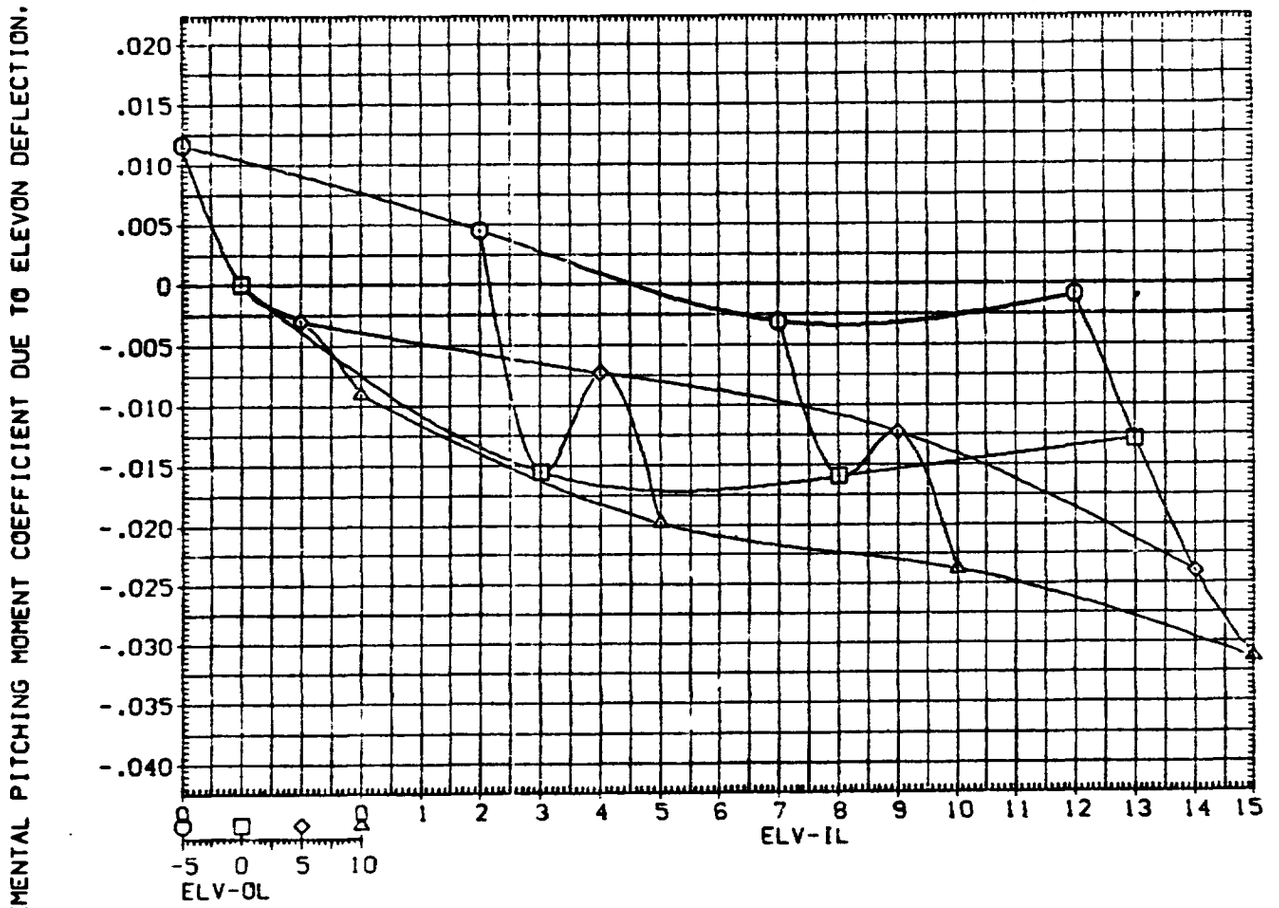
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 6.0 (BINESI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

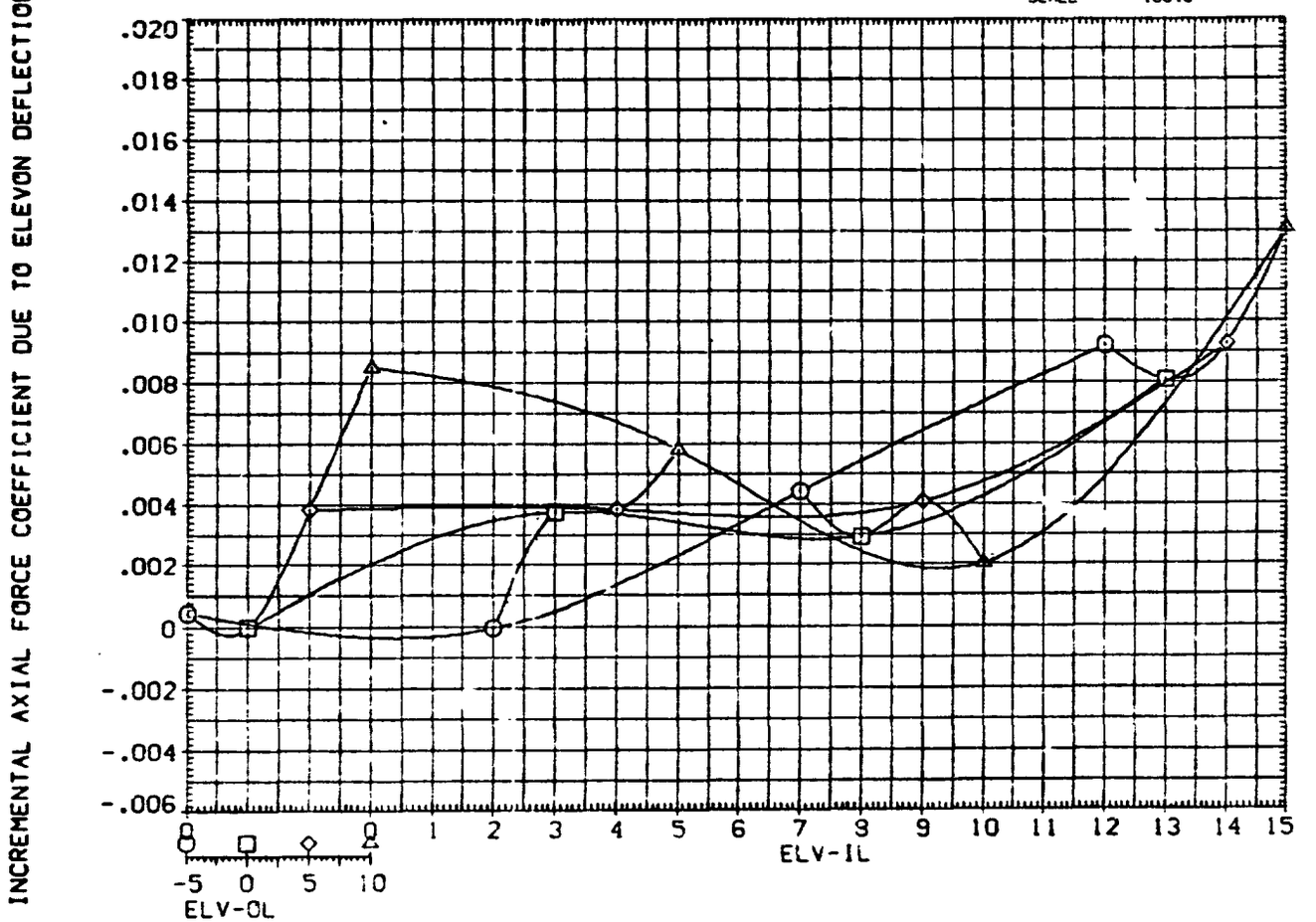
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 6.0 (BINESI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

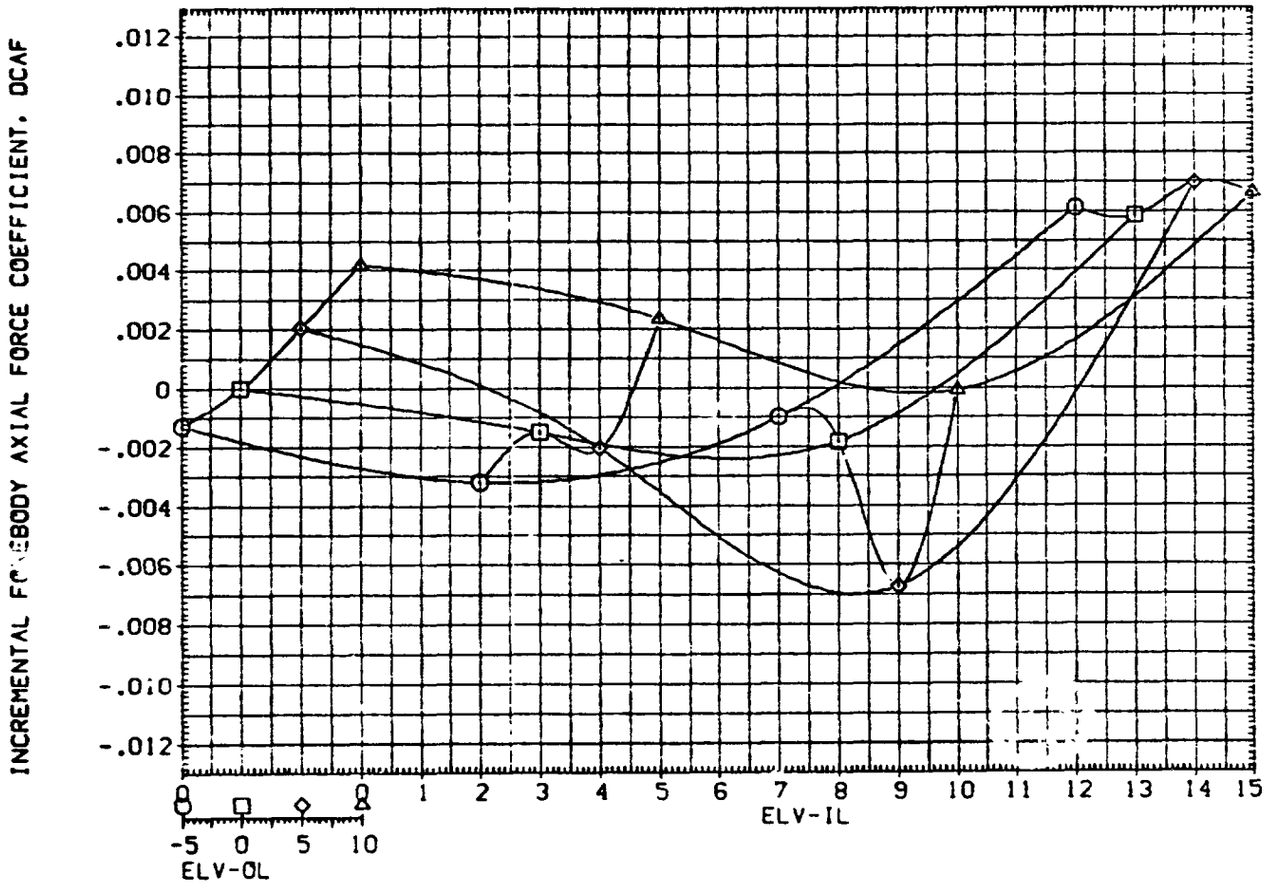
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 6.0 (BINESI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

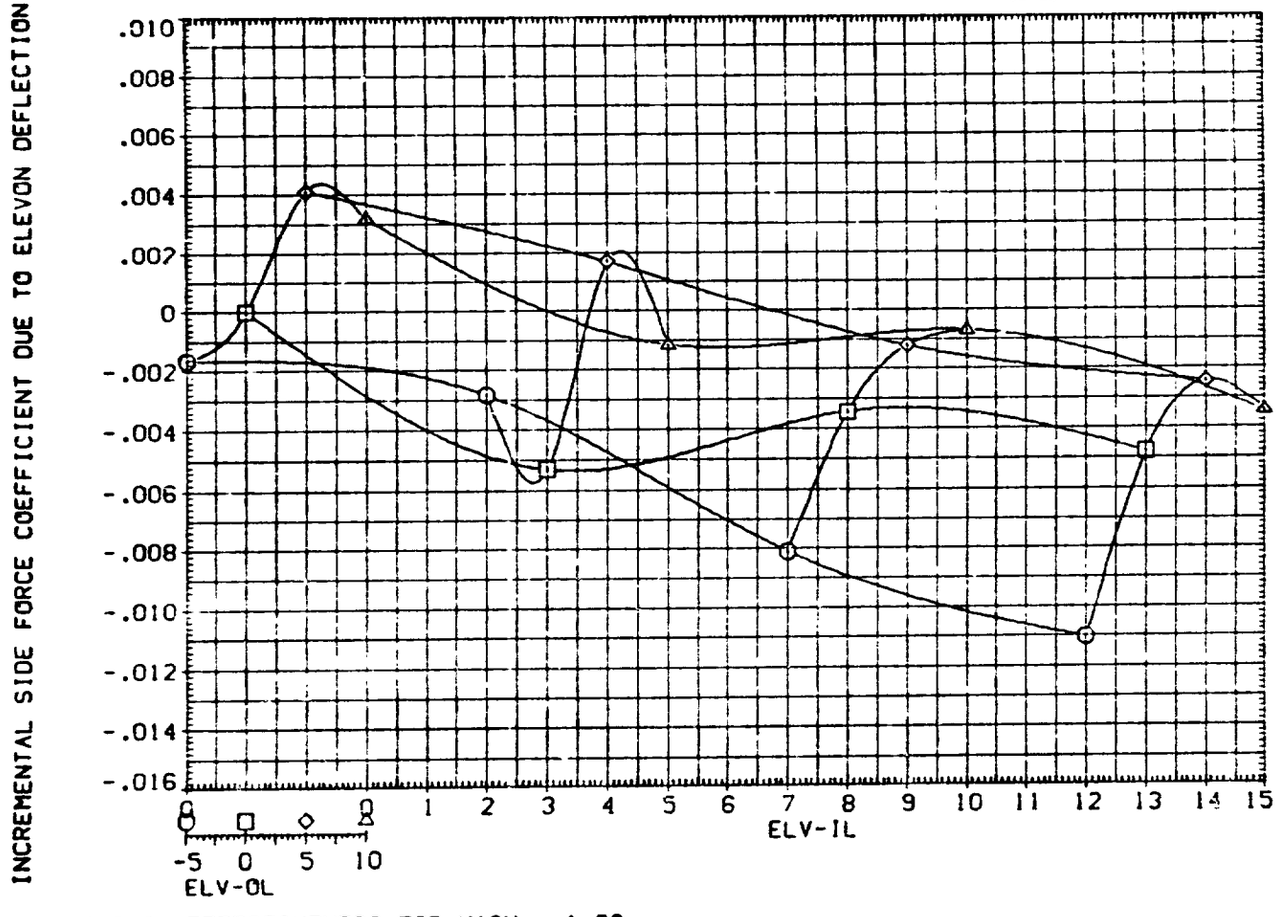
MSFC TWT 622 (IA125) 7.1 OTS. M= 1.2. ALPHA= 6.0 (BINESI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

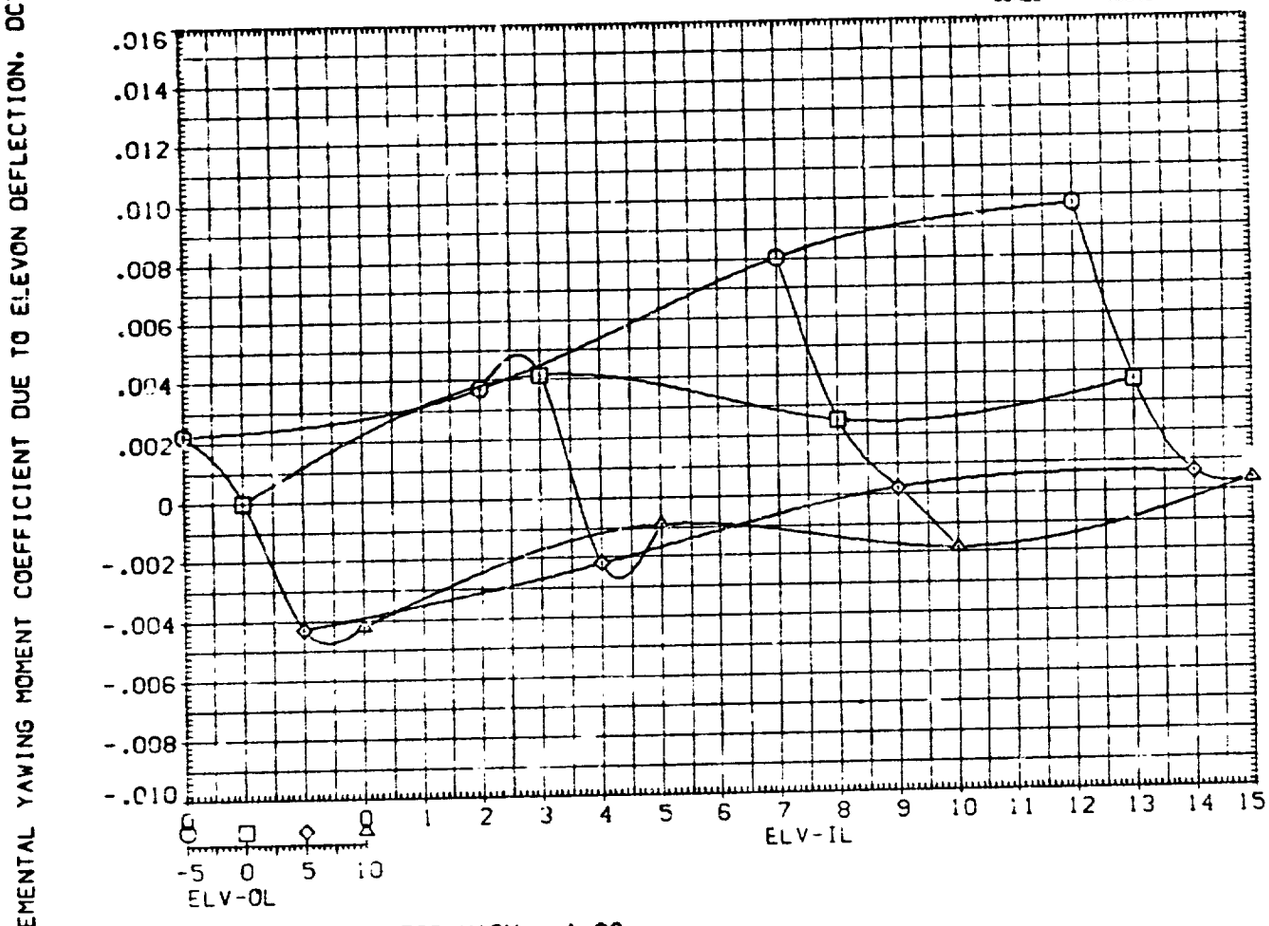
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 6.0 (BINESI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

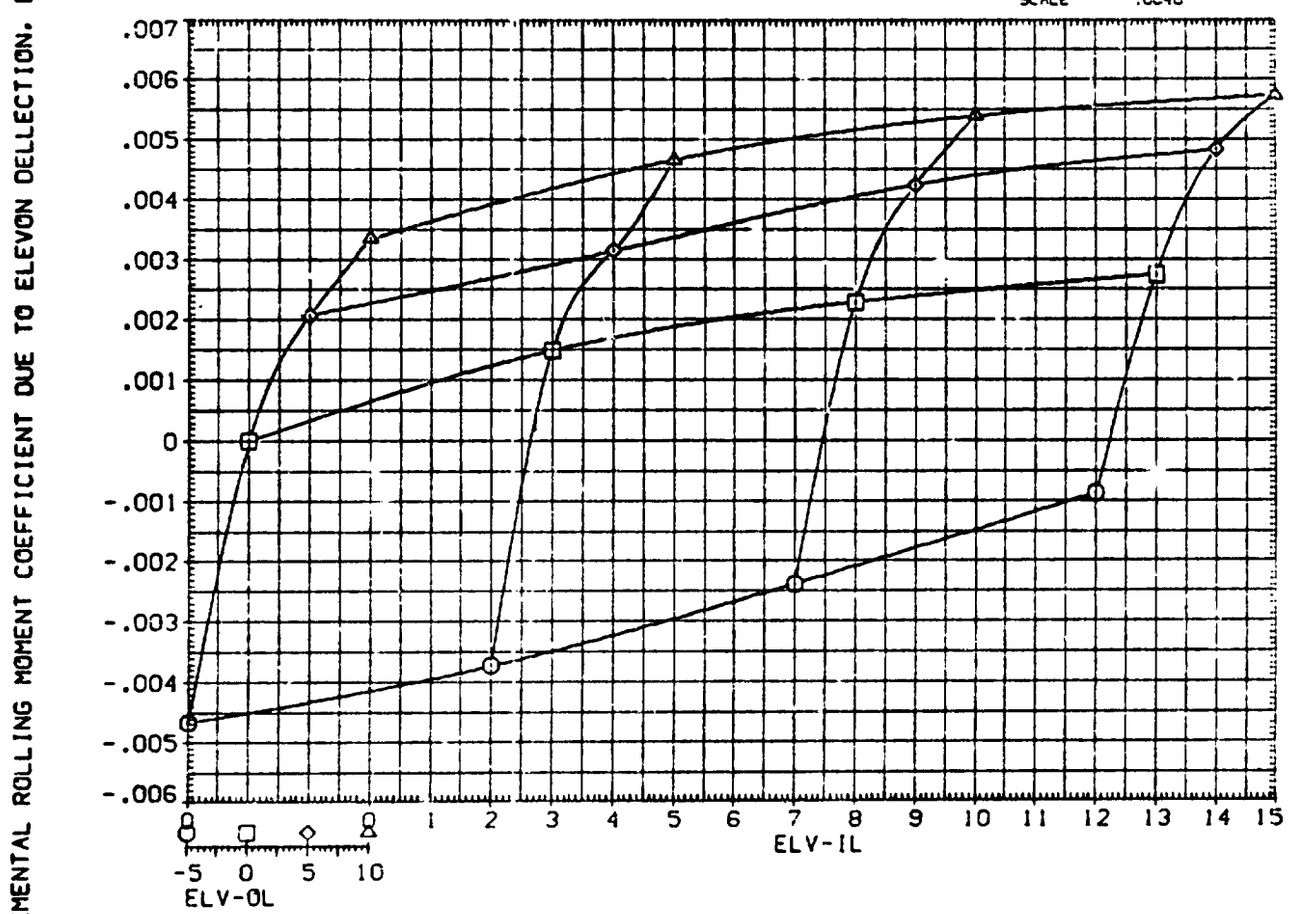
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 6.0 (BINESI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.200	ELV-IR	.000
ELV OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

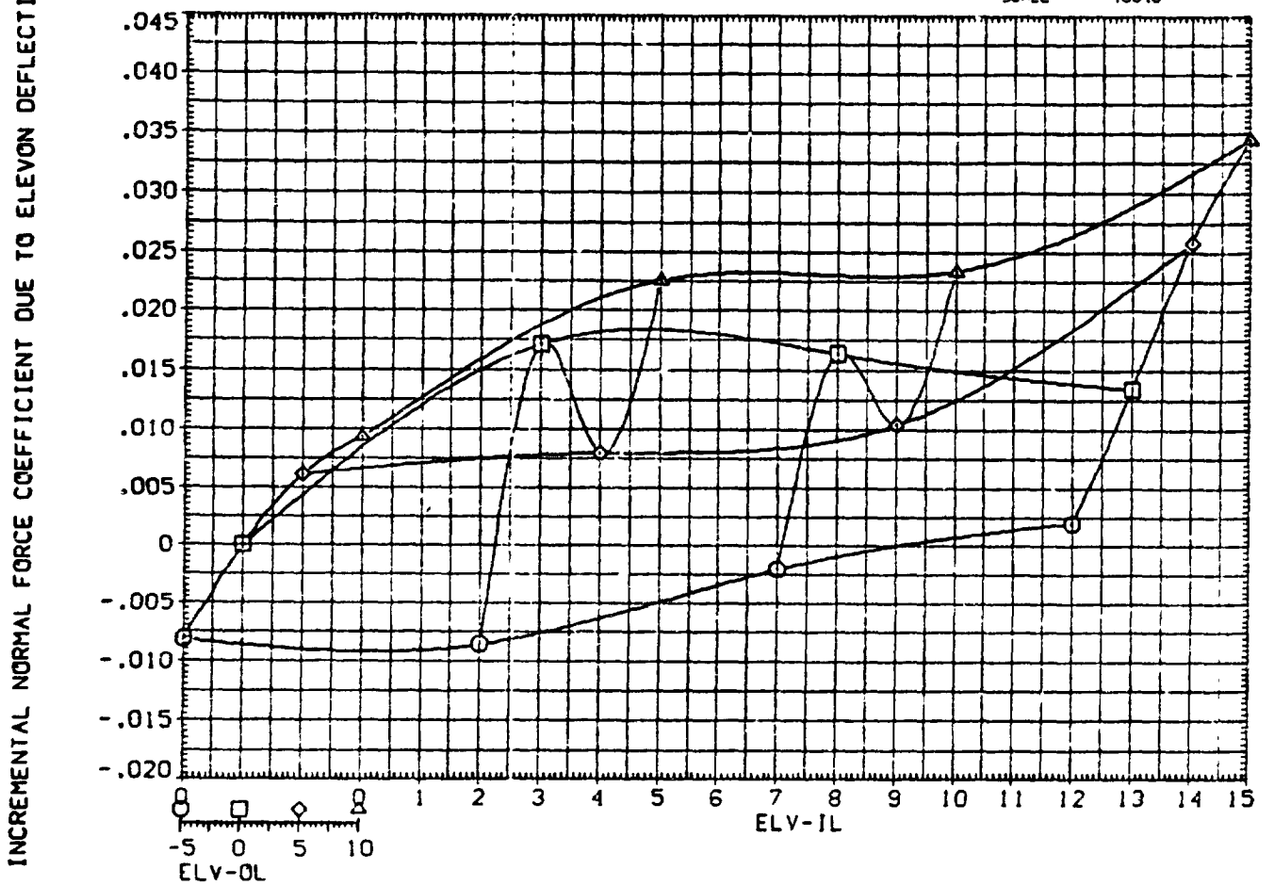
MSFC TWT 622 (IA125) 74 OTS. M= 1.2, ALPHA= 8.0 (BINESJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

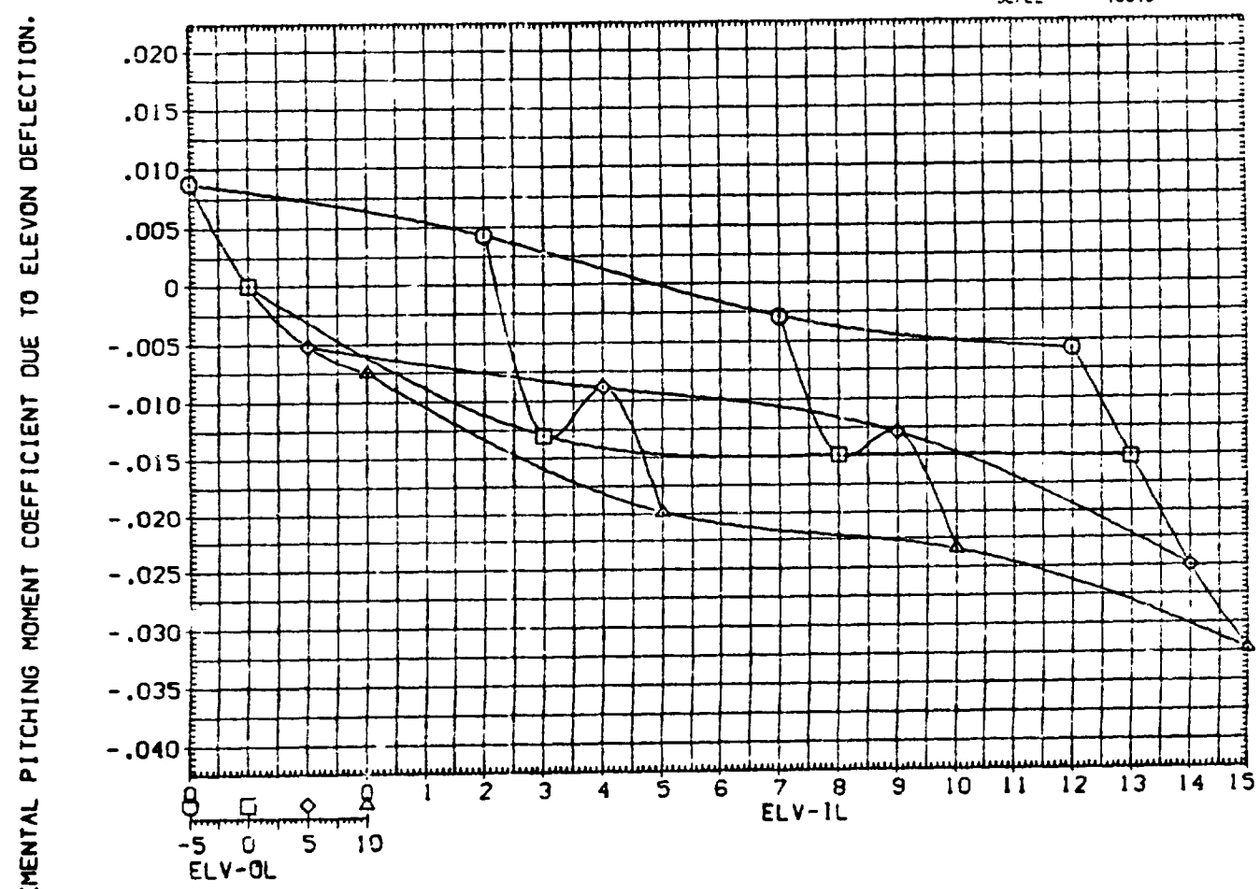
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 8.0 (BINESJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.200	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	970.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

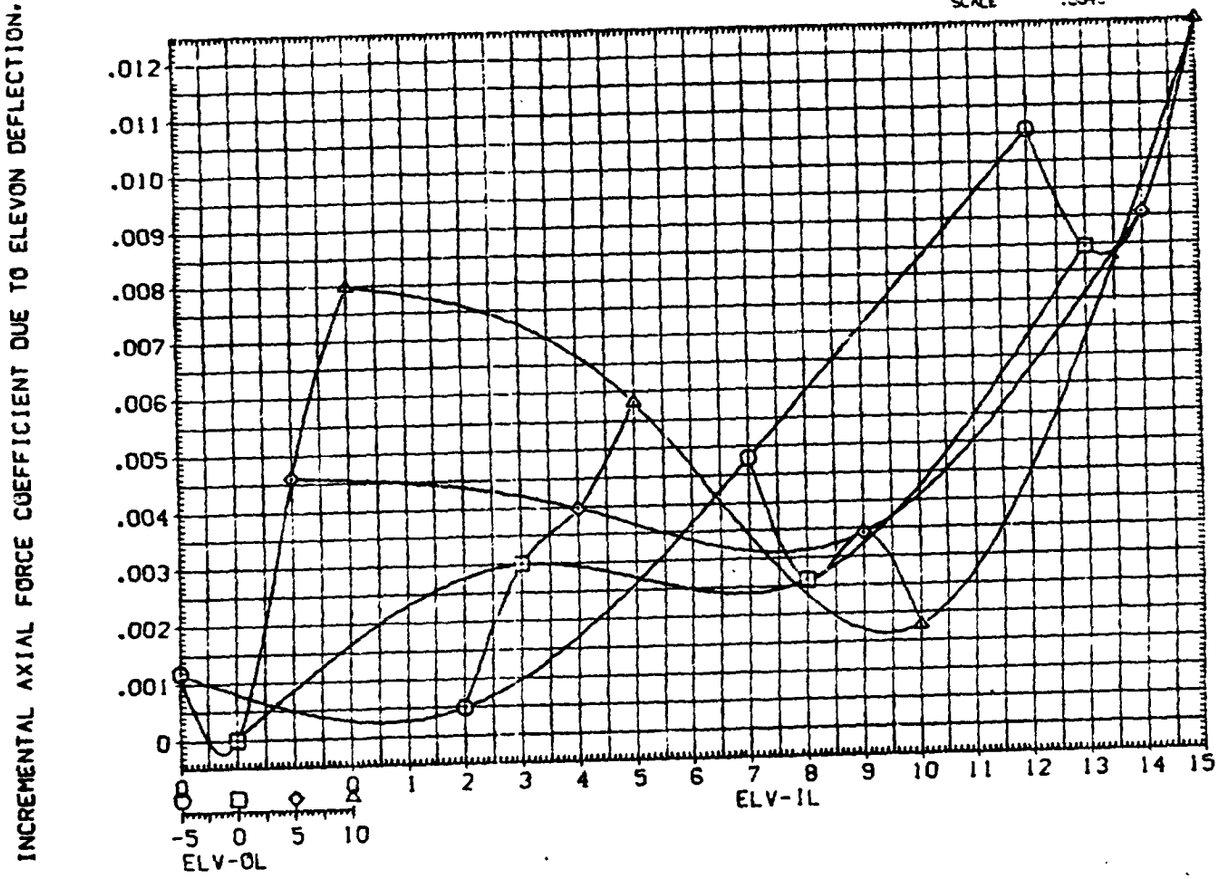
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 8.0 (BINESJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

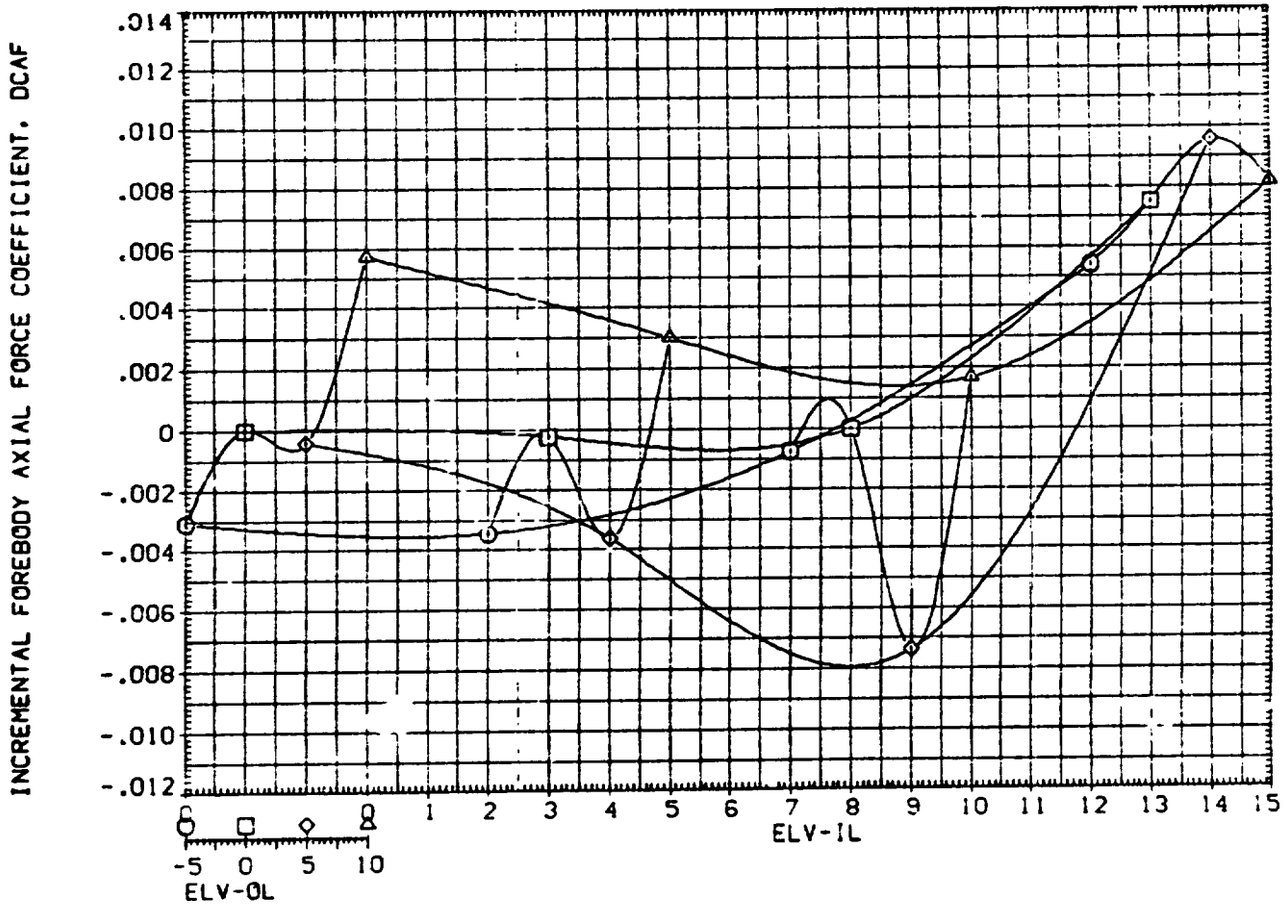
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 8.0 (BINESJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

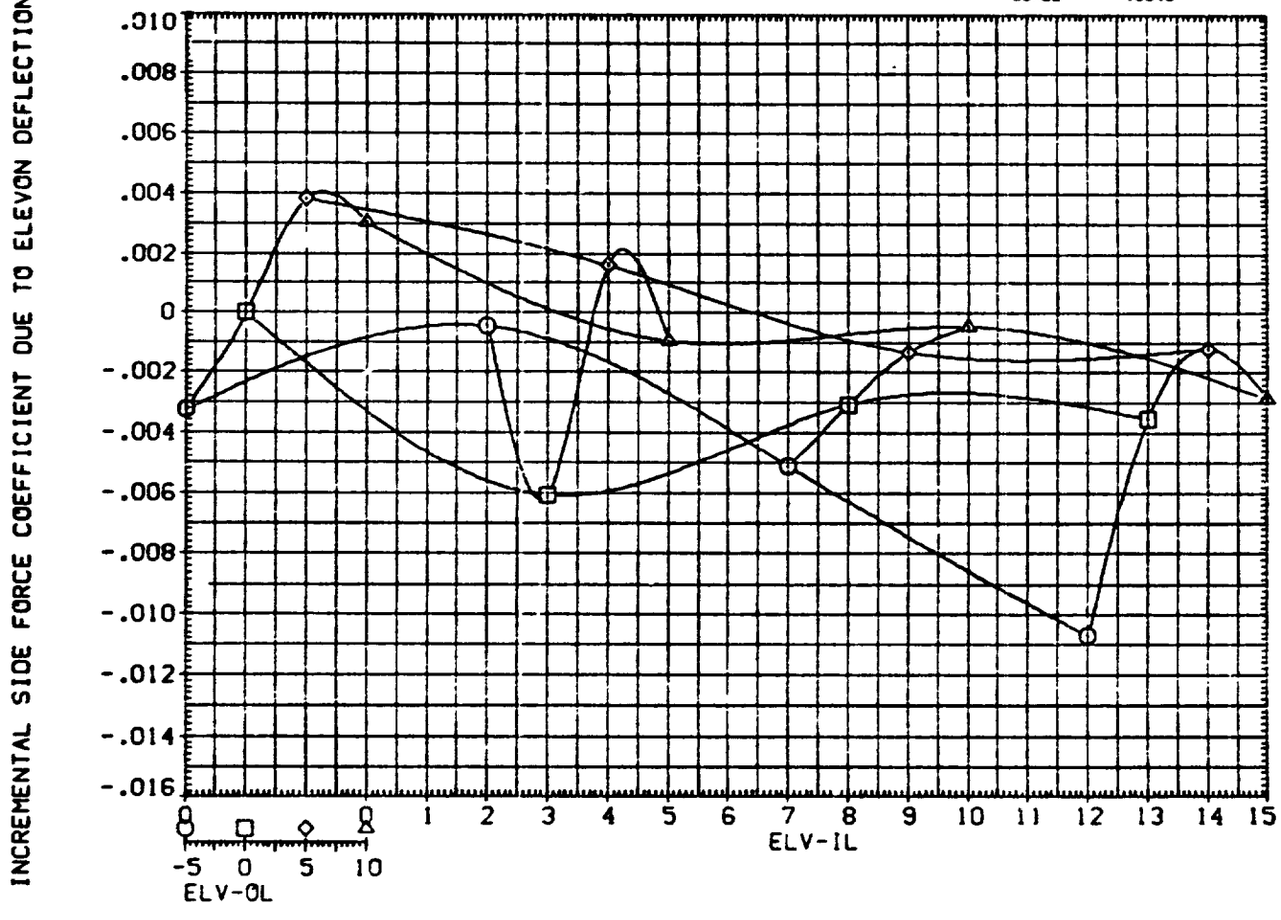
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 8.0 (BINESJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

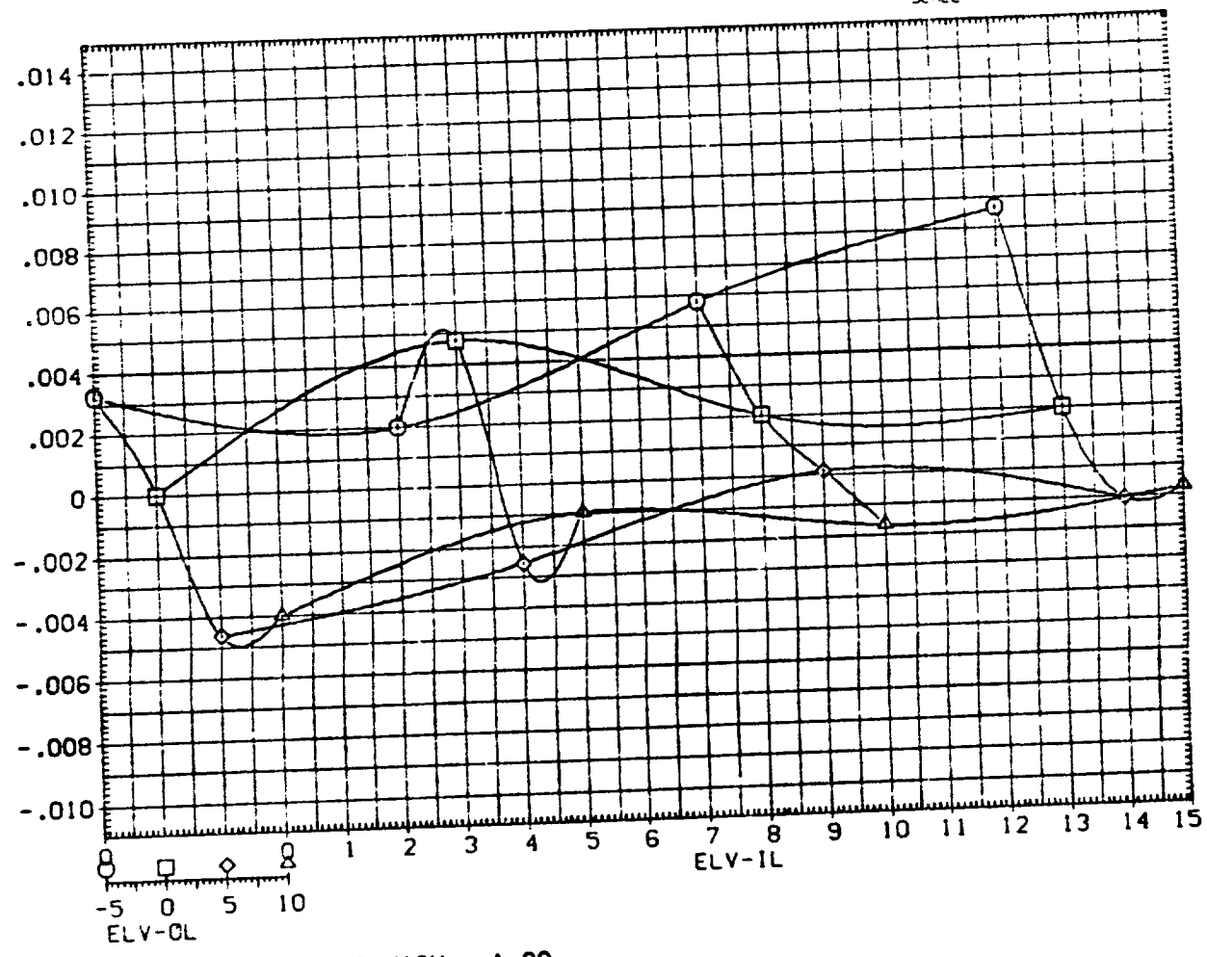
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 8.0 (BINESJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
CREF	1293.3000	INCHES
BREF	1293.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

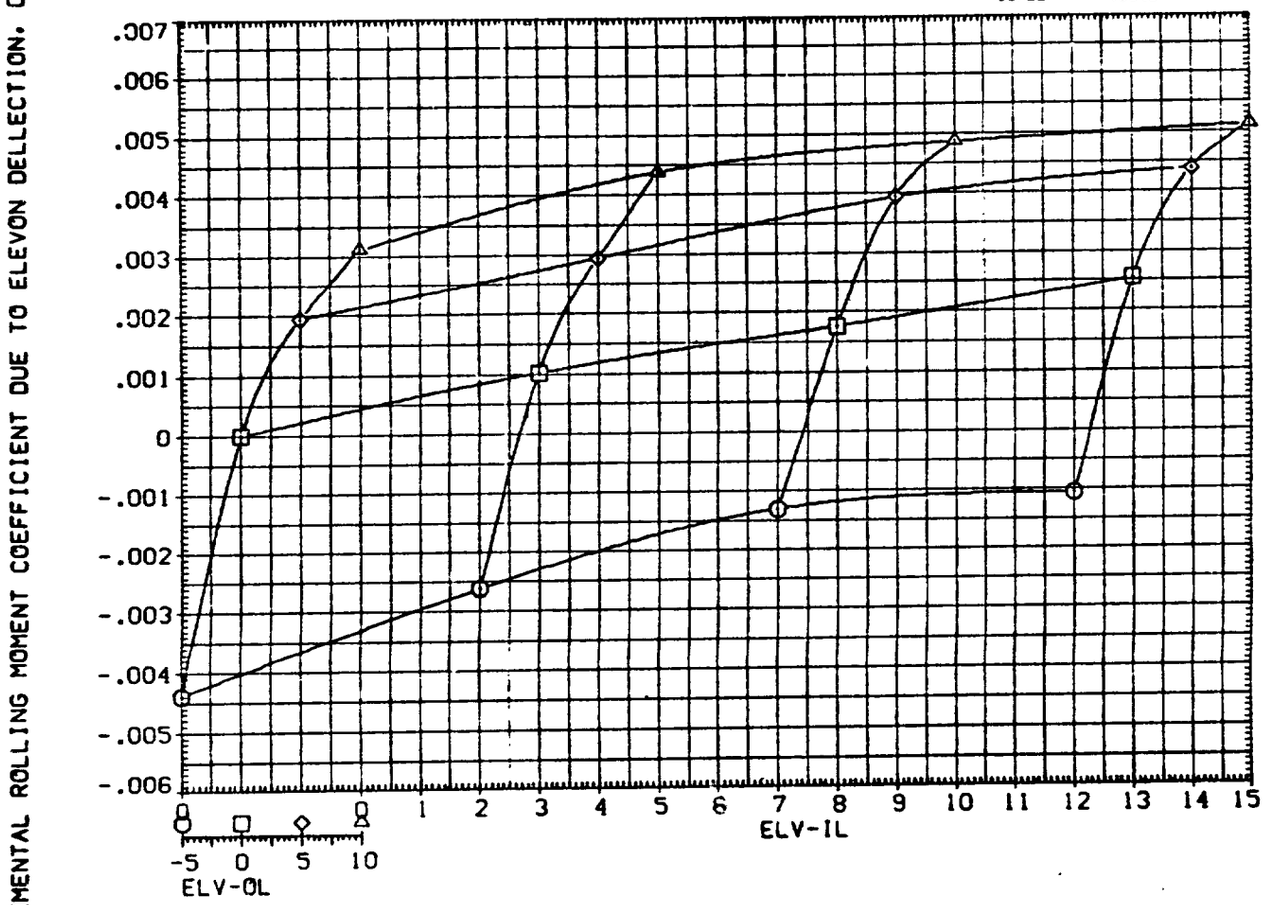
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 8.0 (BINESJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

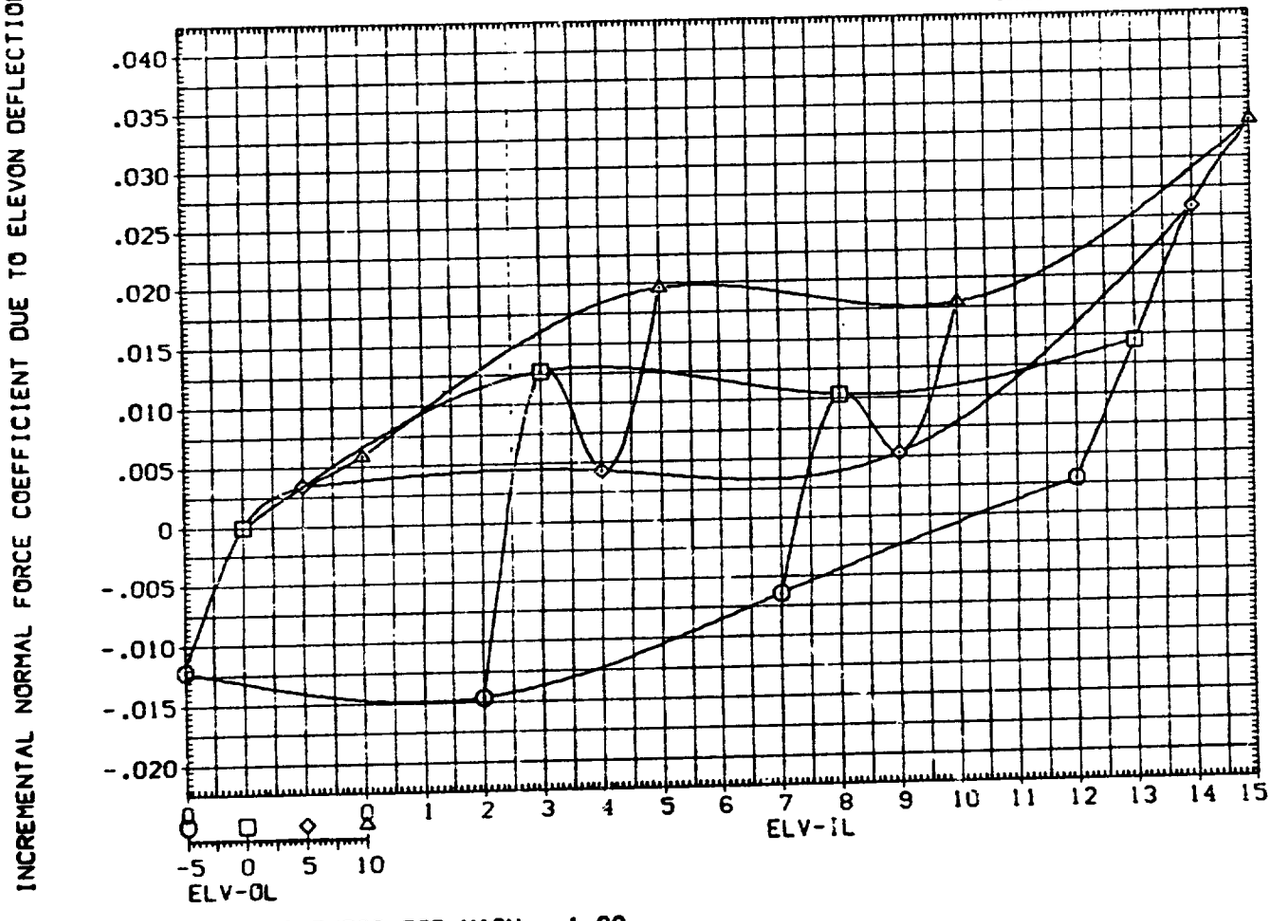
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 10.0(BINESK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

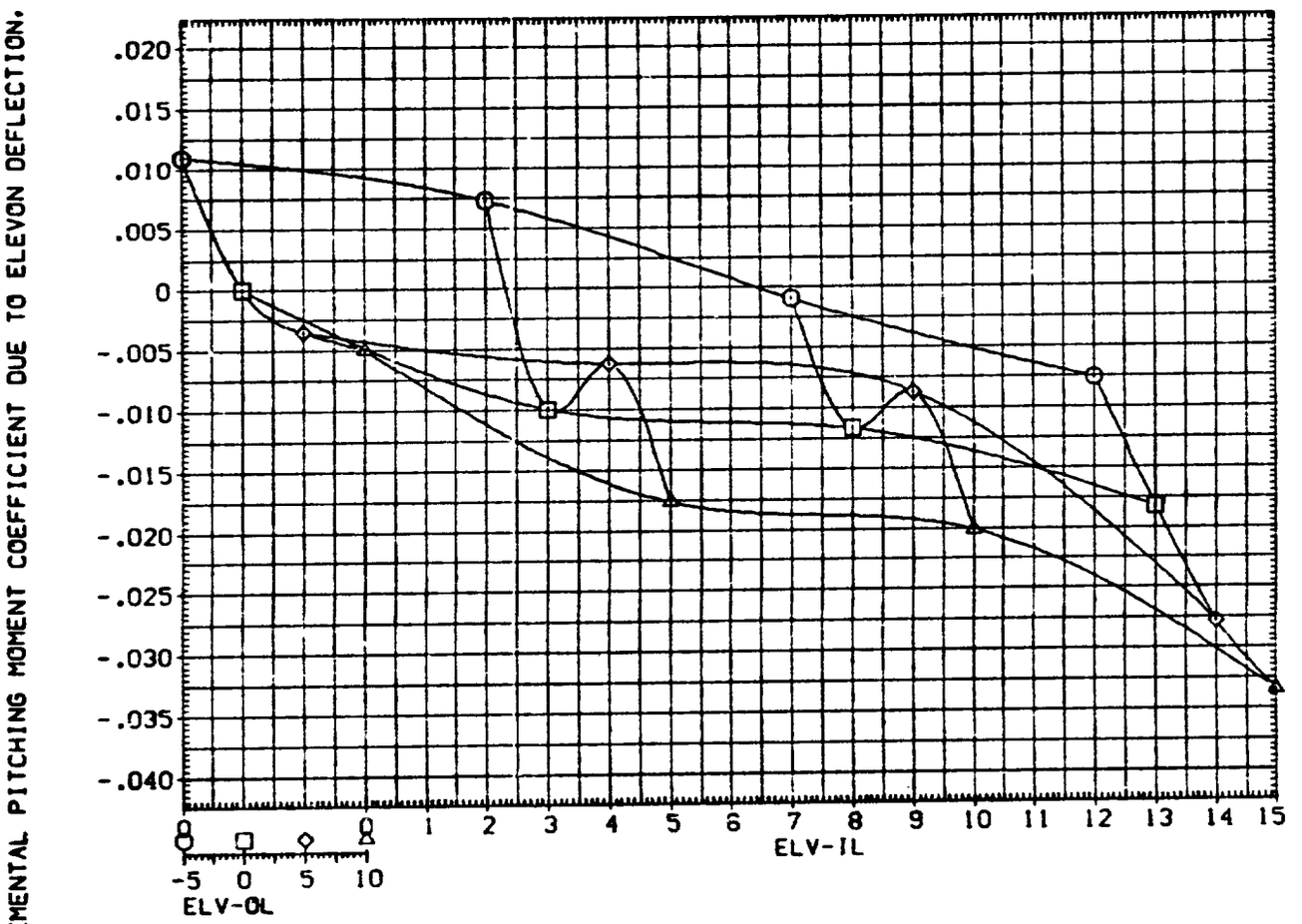
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 10.0(BINESK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

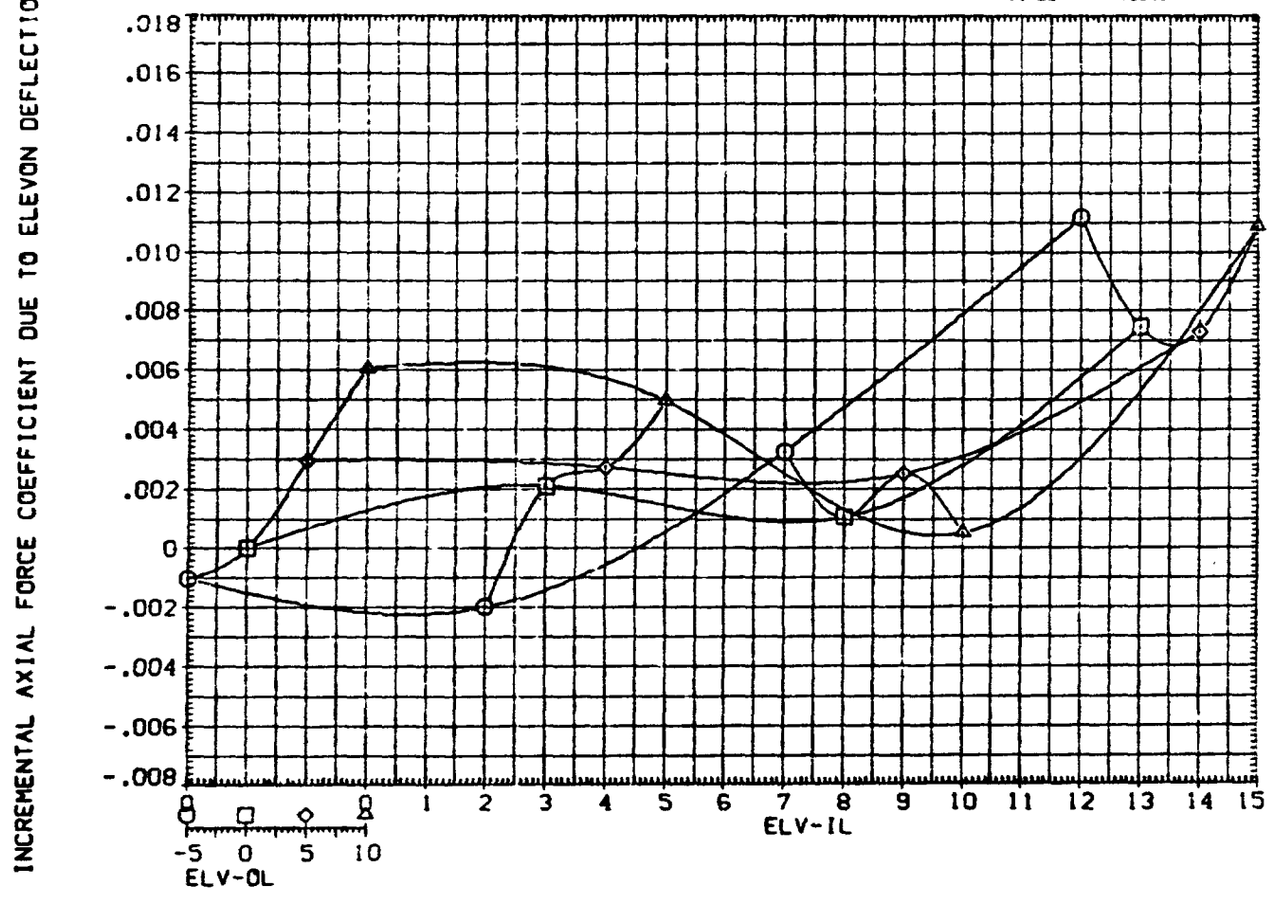
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 10.0(BINESK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

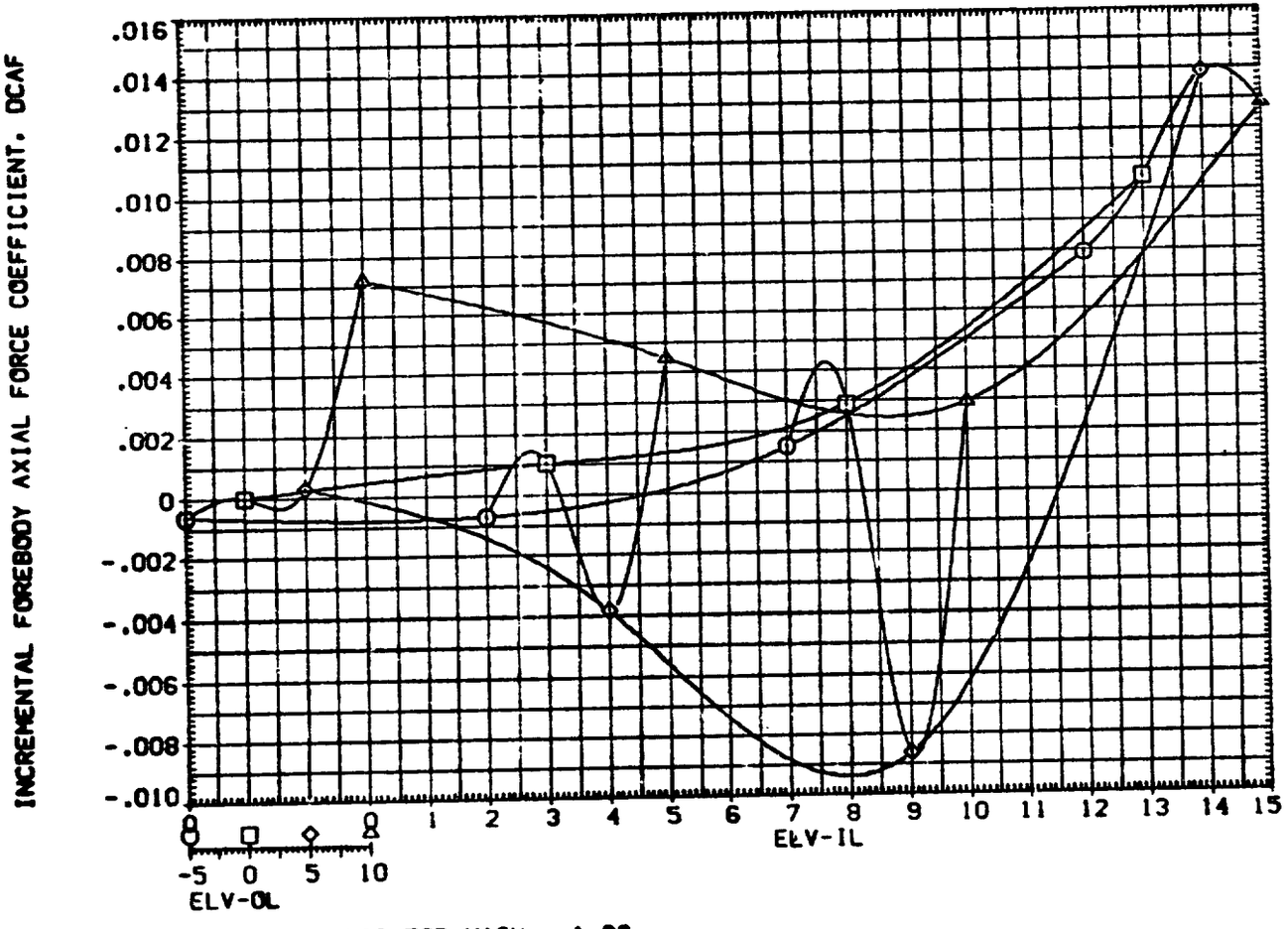
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 10.0(BINESK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

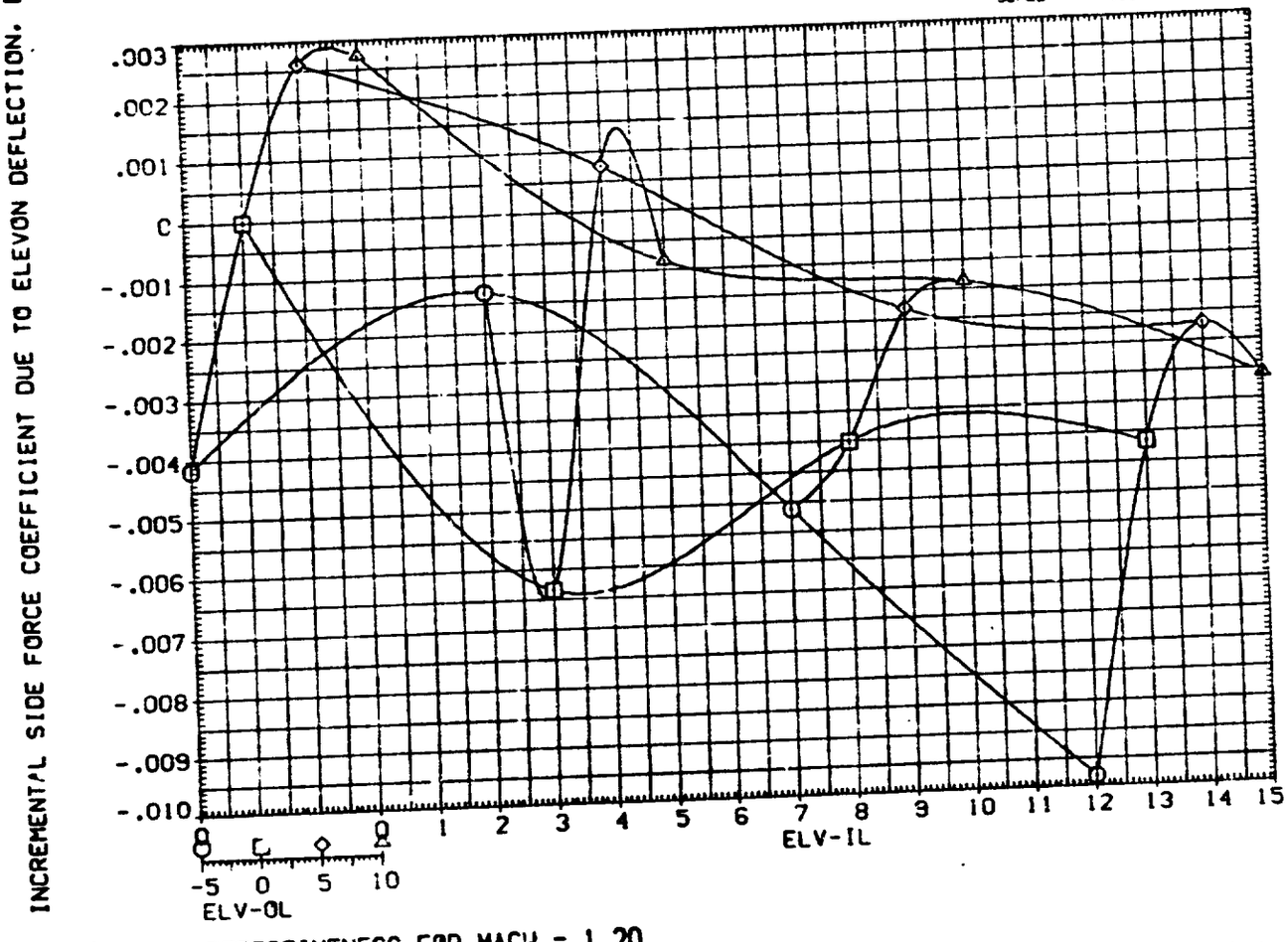
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 10.0(BINESK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

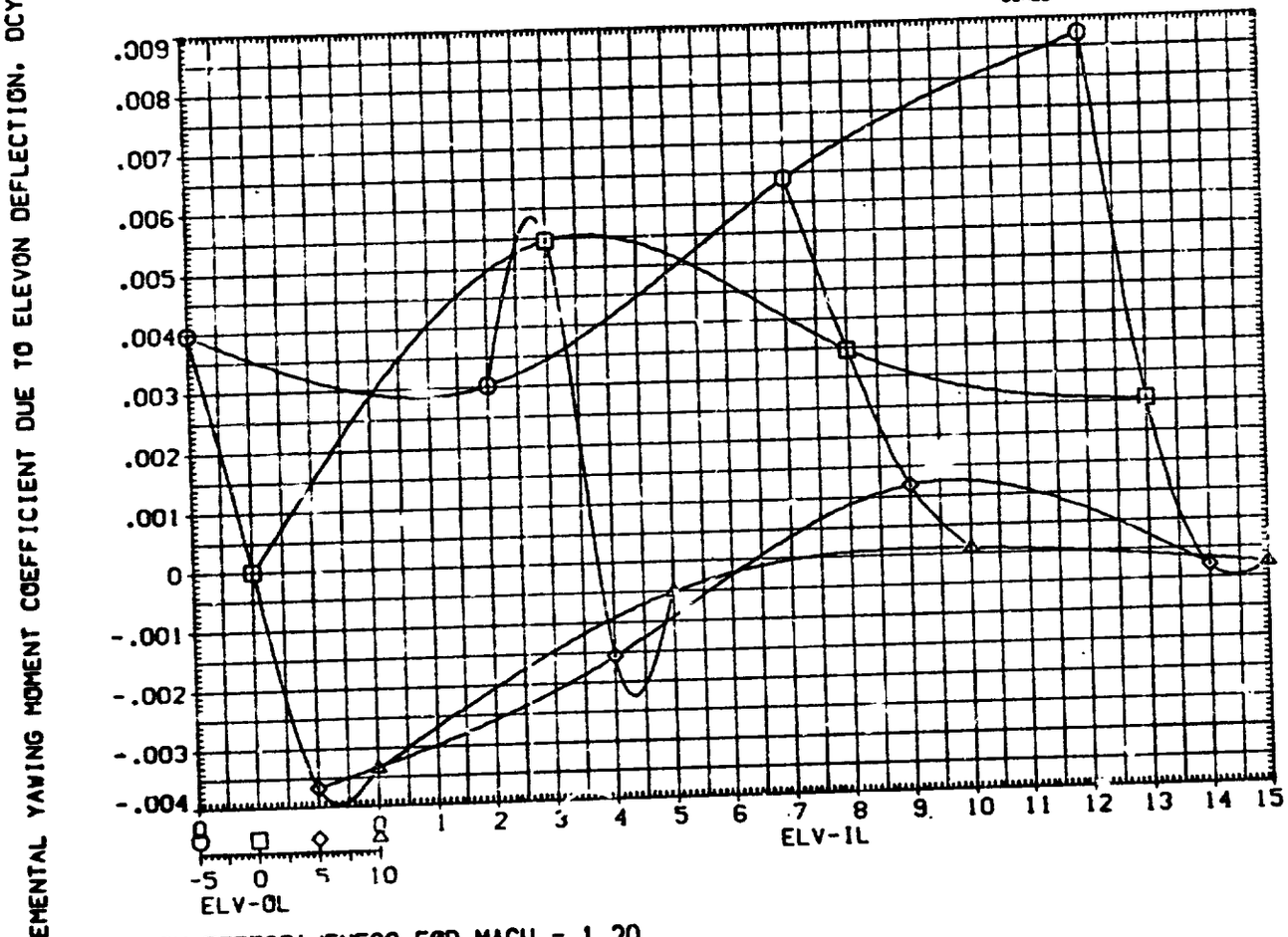
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 10.0(BINESK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

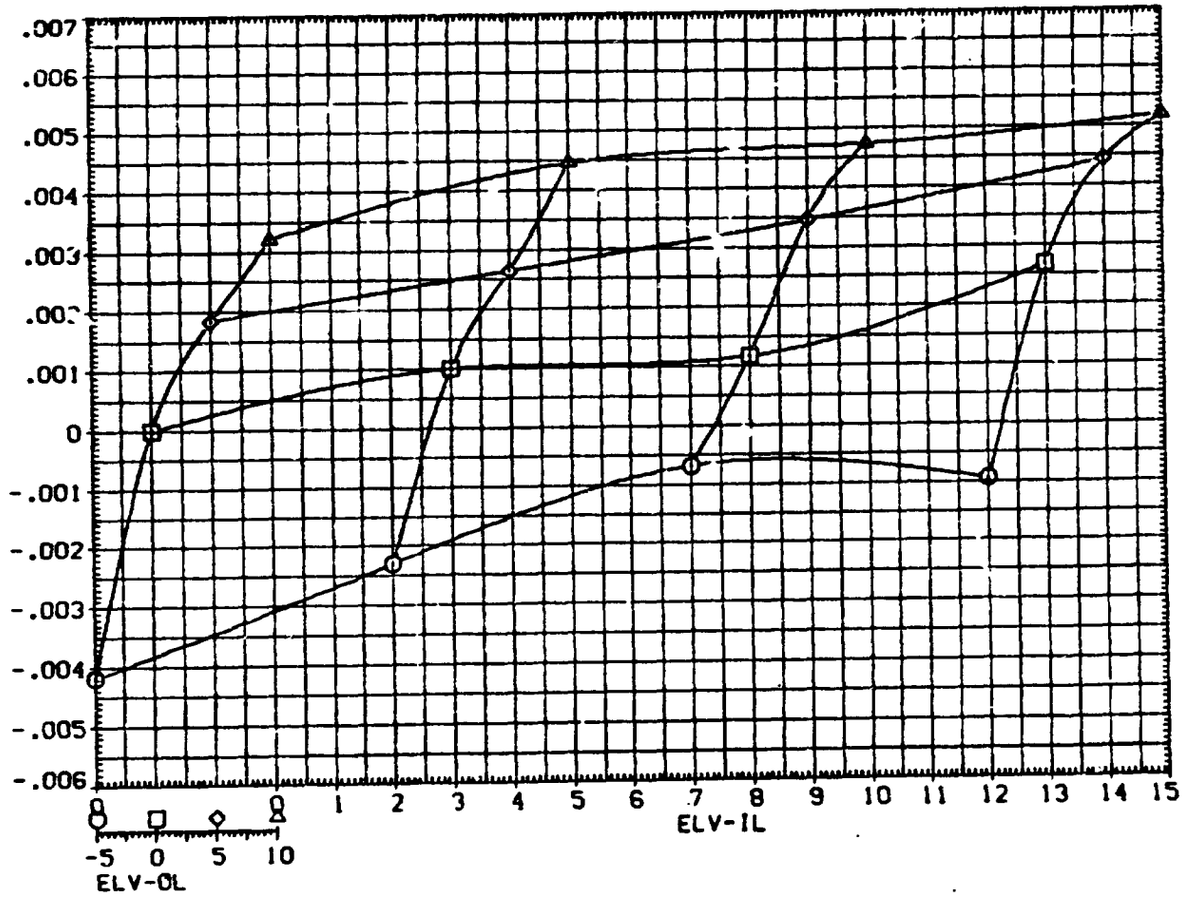
MSFC TWT 622 (IA125) 74 OTS. M= 1.2. ALPHA= 10.0(BINESK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.200	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.20

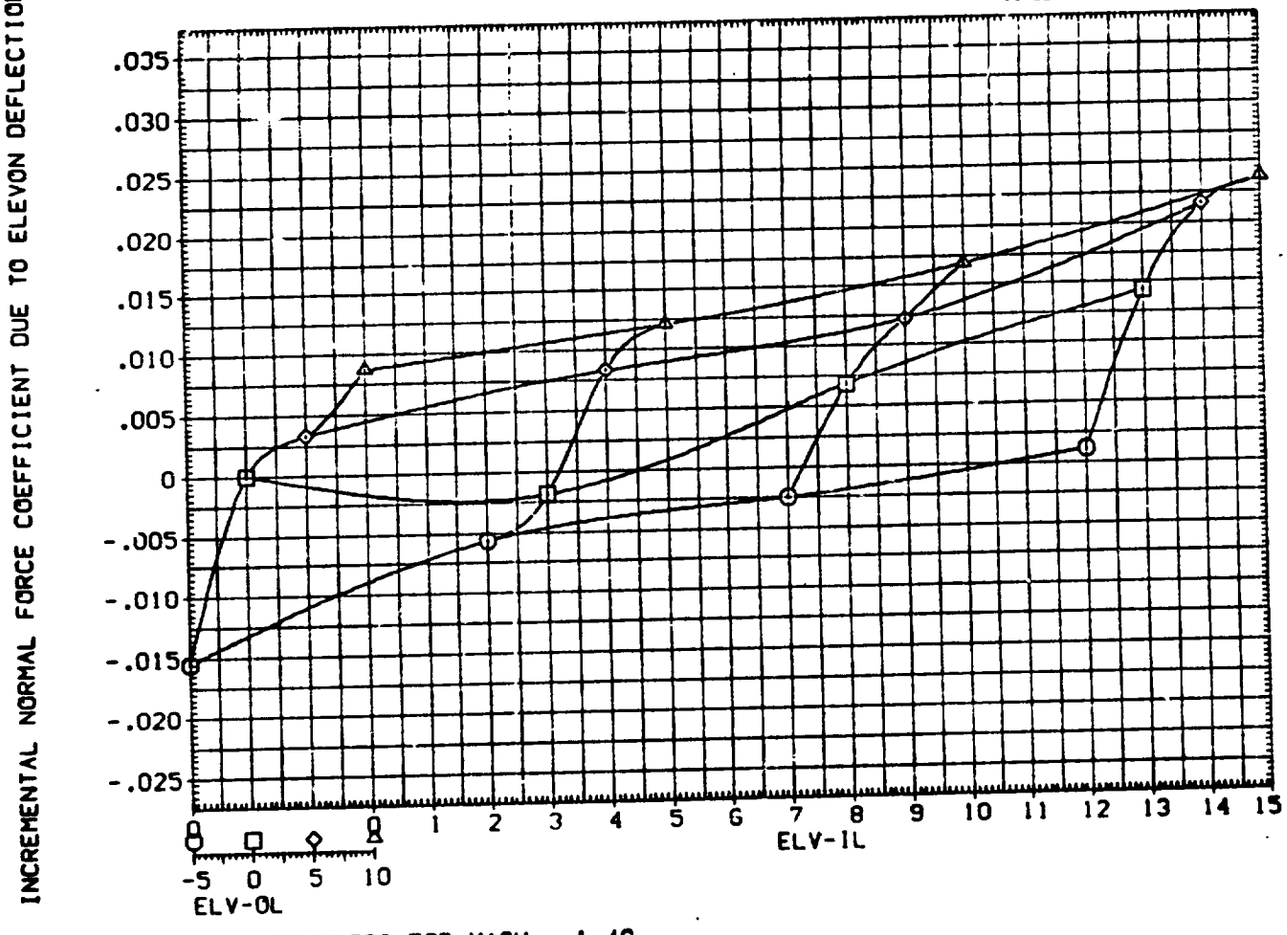
MSFC TWT 622 (!A125) 74 OTS. M=1.46. ALPHA=-10.0(BINFSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

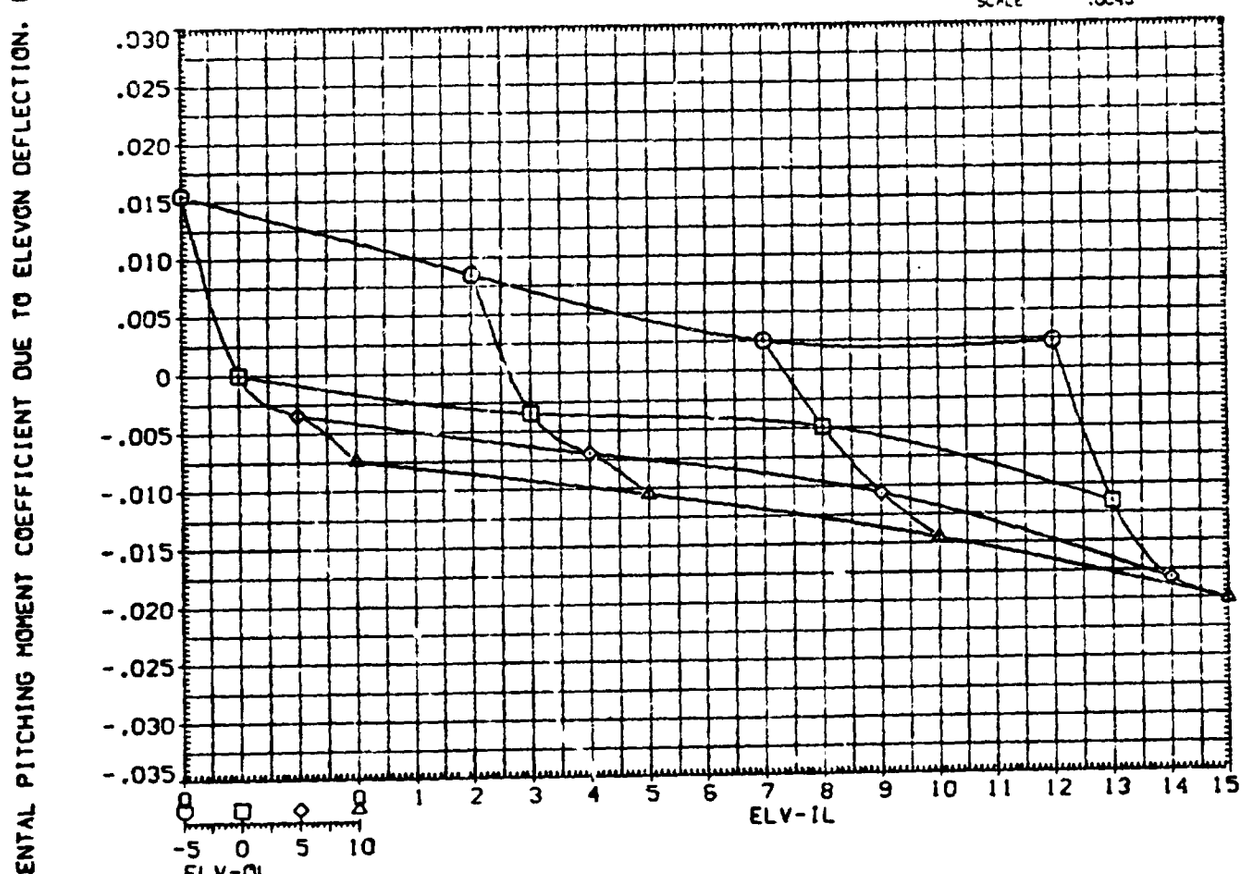
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-10.0(BINFSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

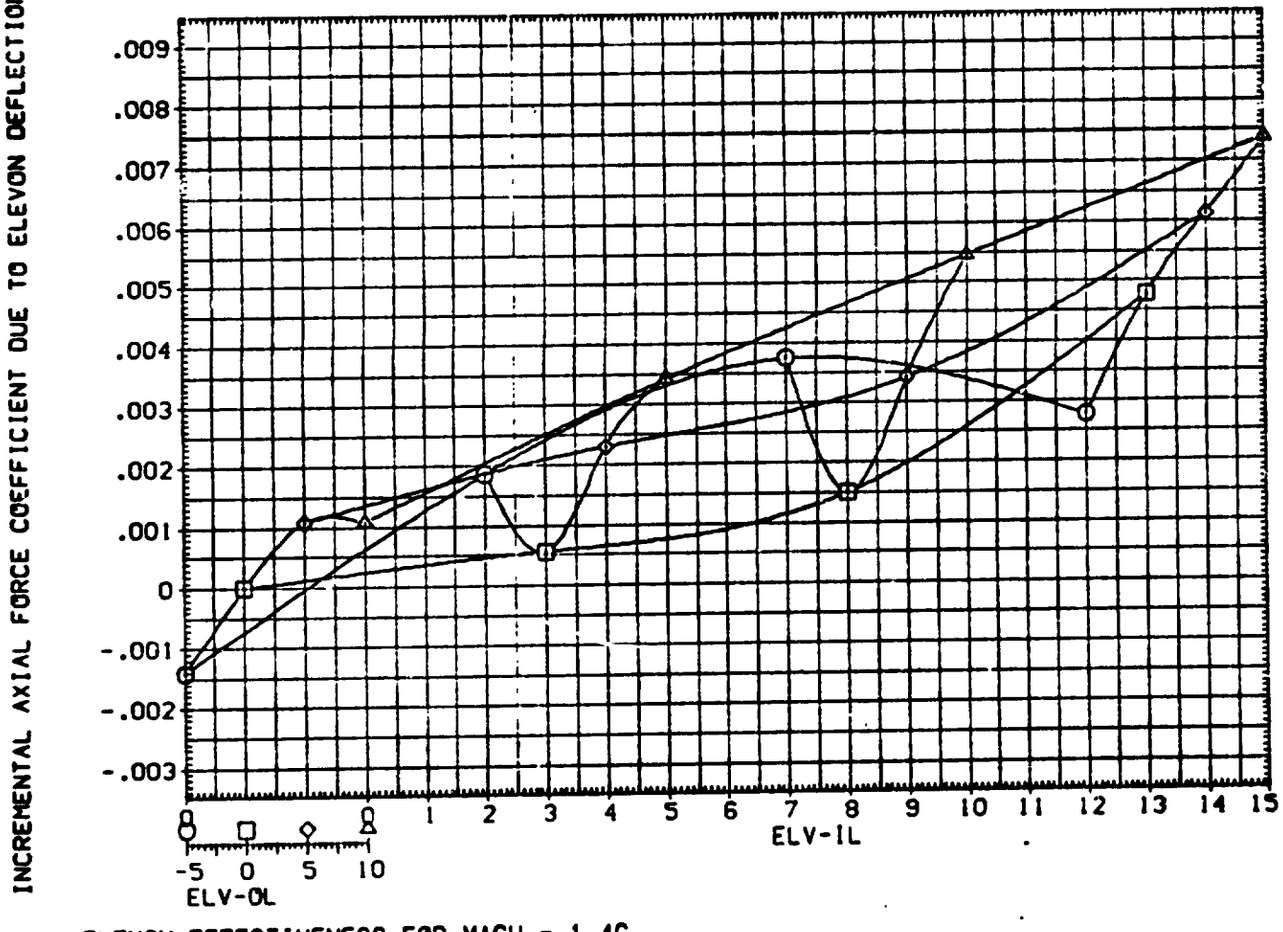
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-10.0(BINFSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

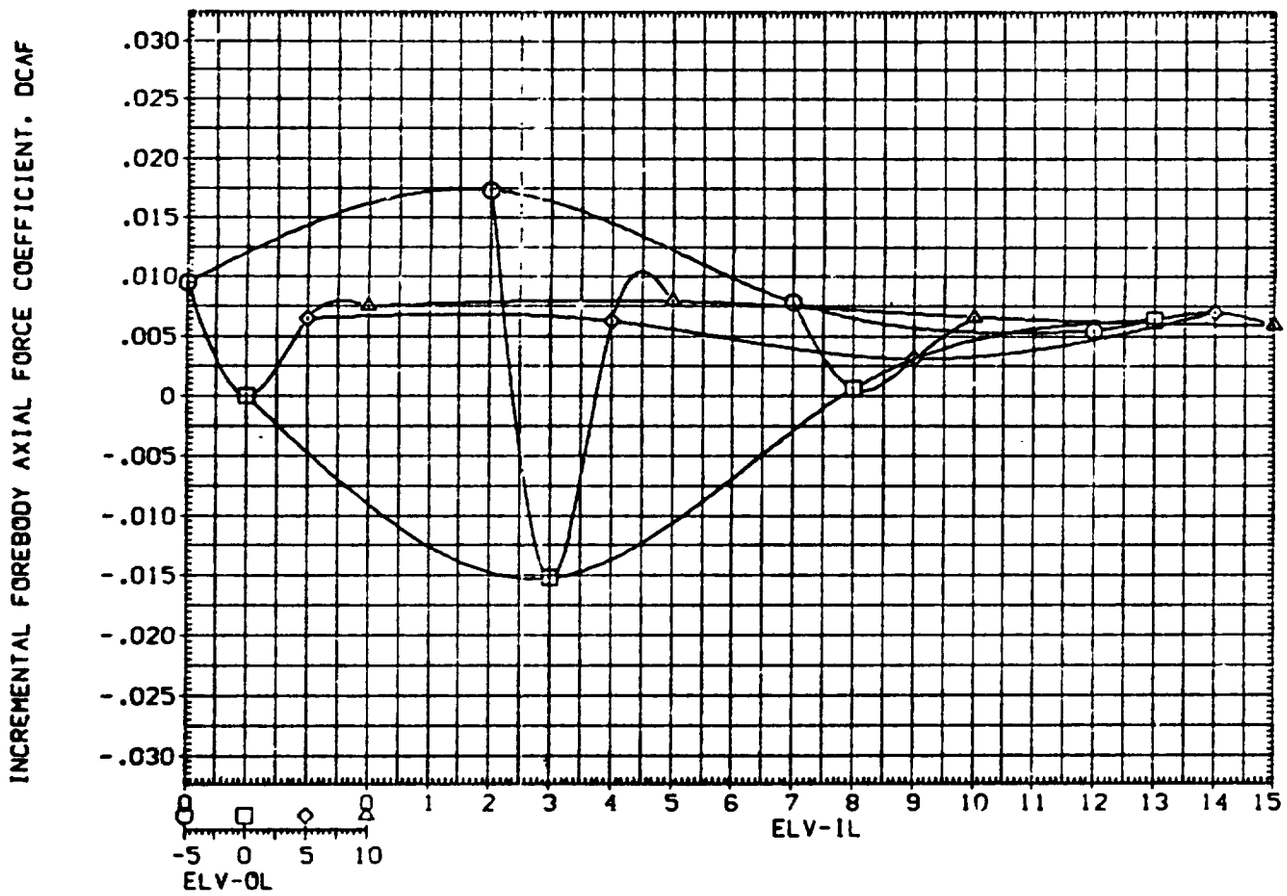
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-10.0(BINFSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

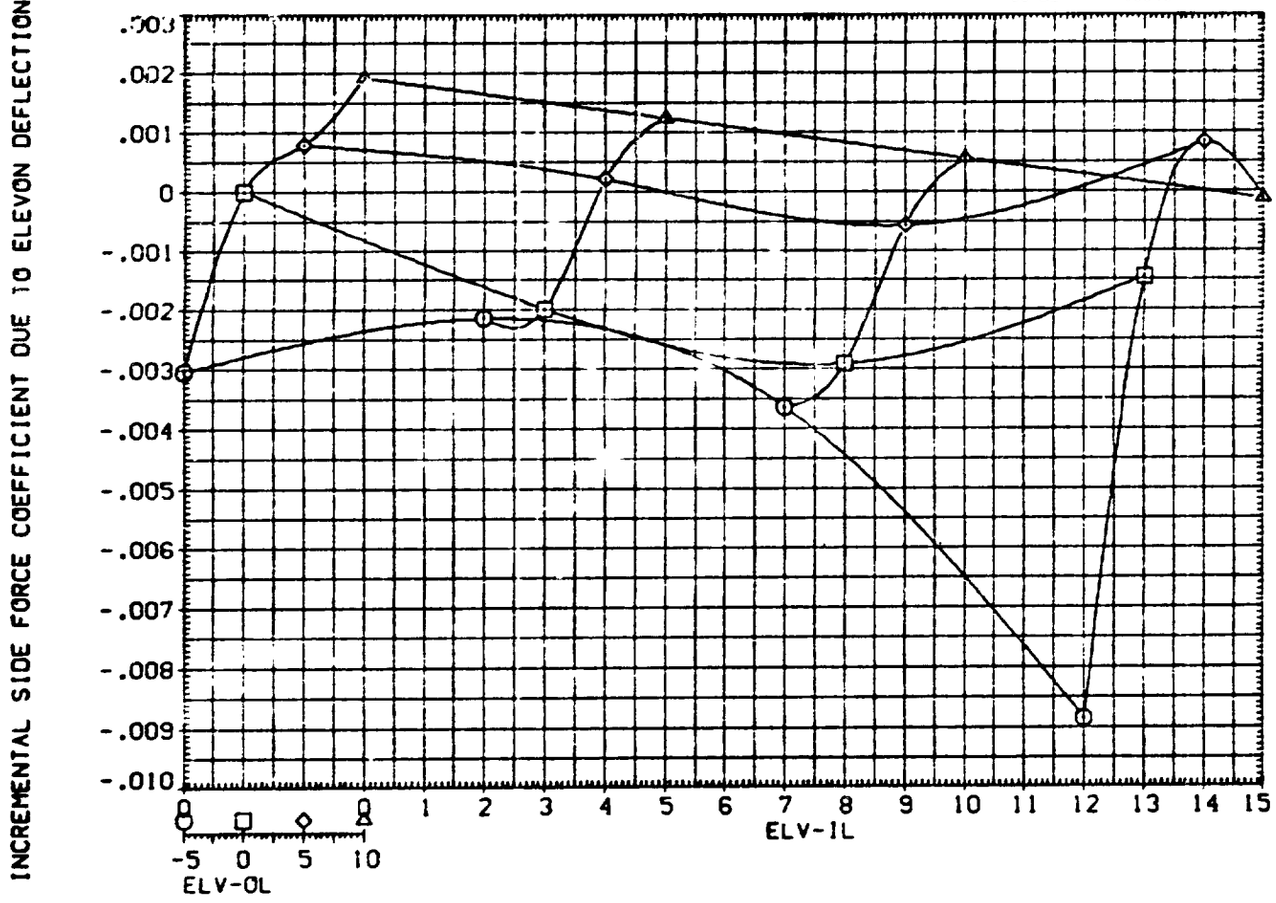
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-10.0(BINFSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

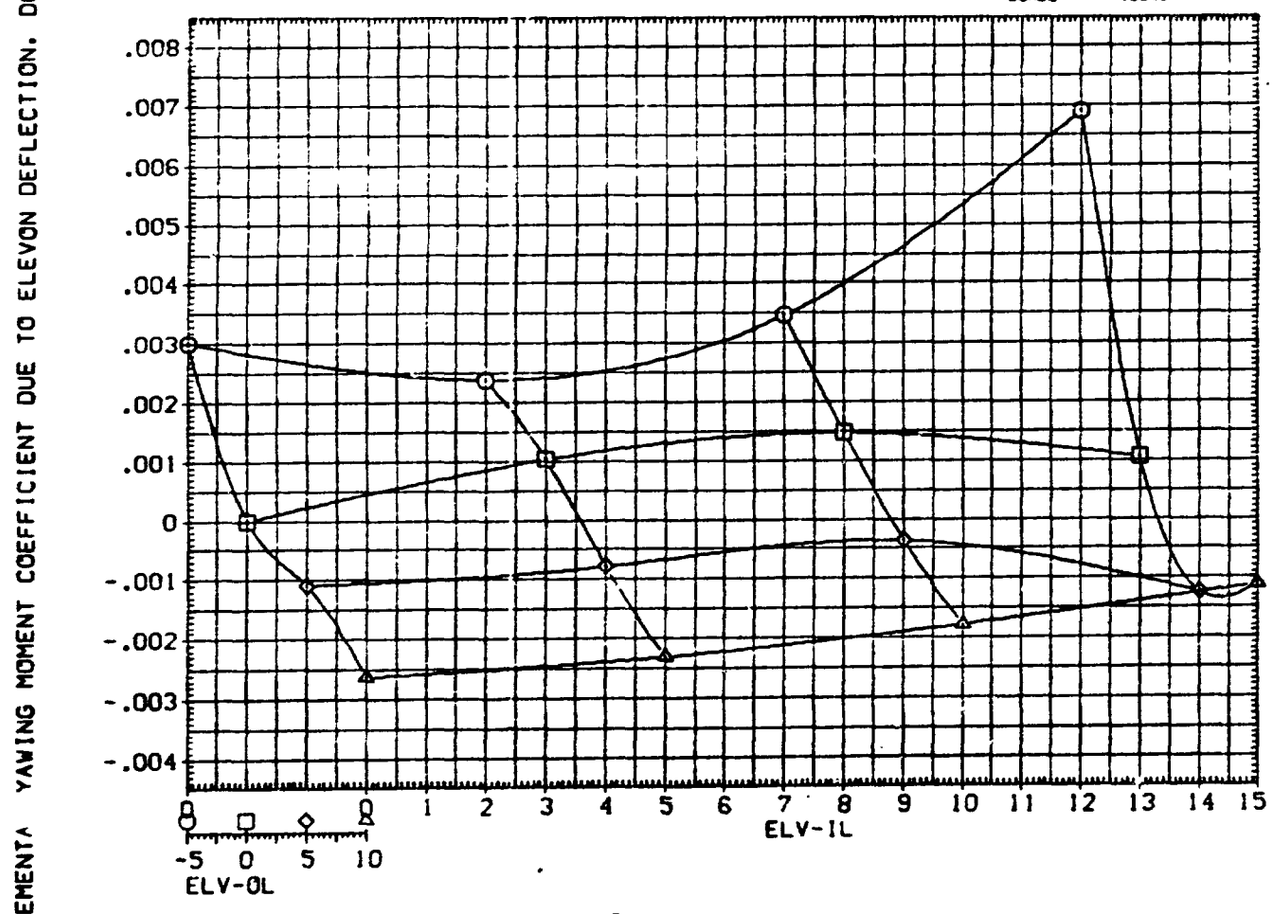
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-10.0(BINFSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

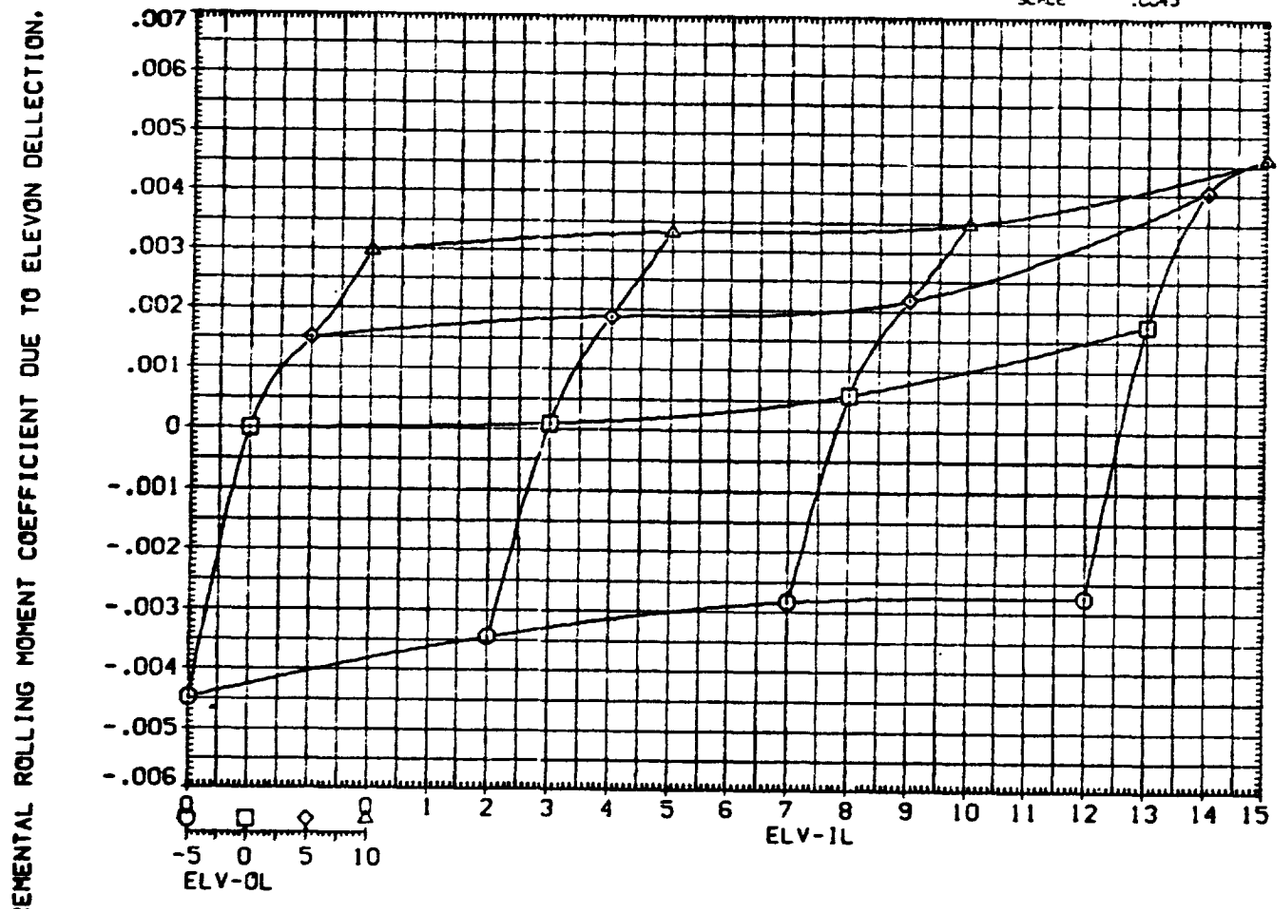
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-10.0(BINFSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

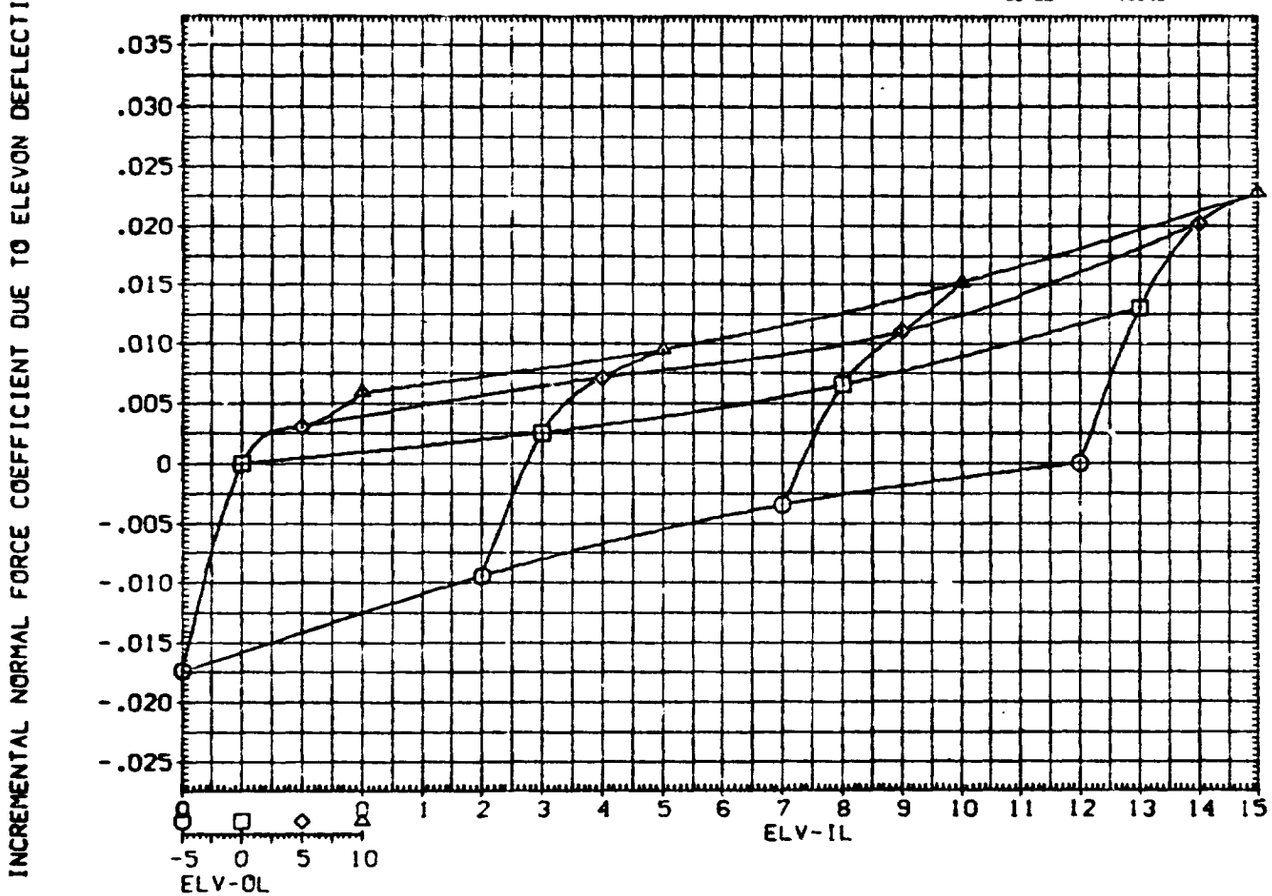
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-8.0 (BINFSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

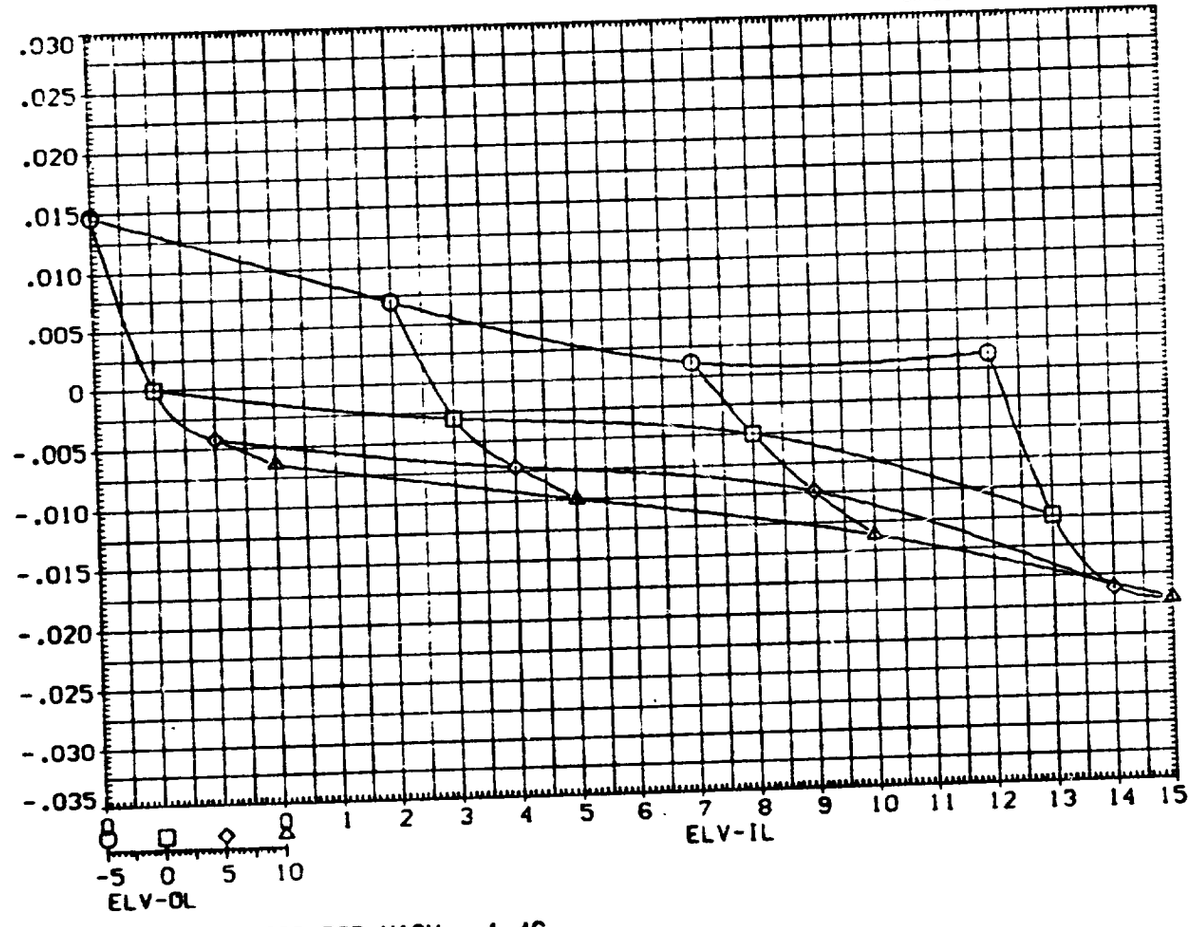
MSFC TWT 622 (:A125) 74 OTS. M-1.46. ALPHA=-8.0 (BINFSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

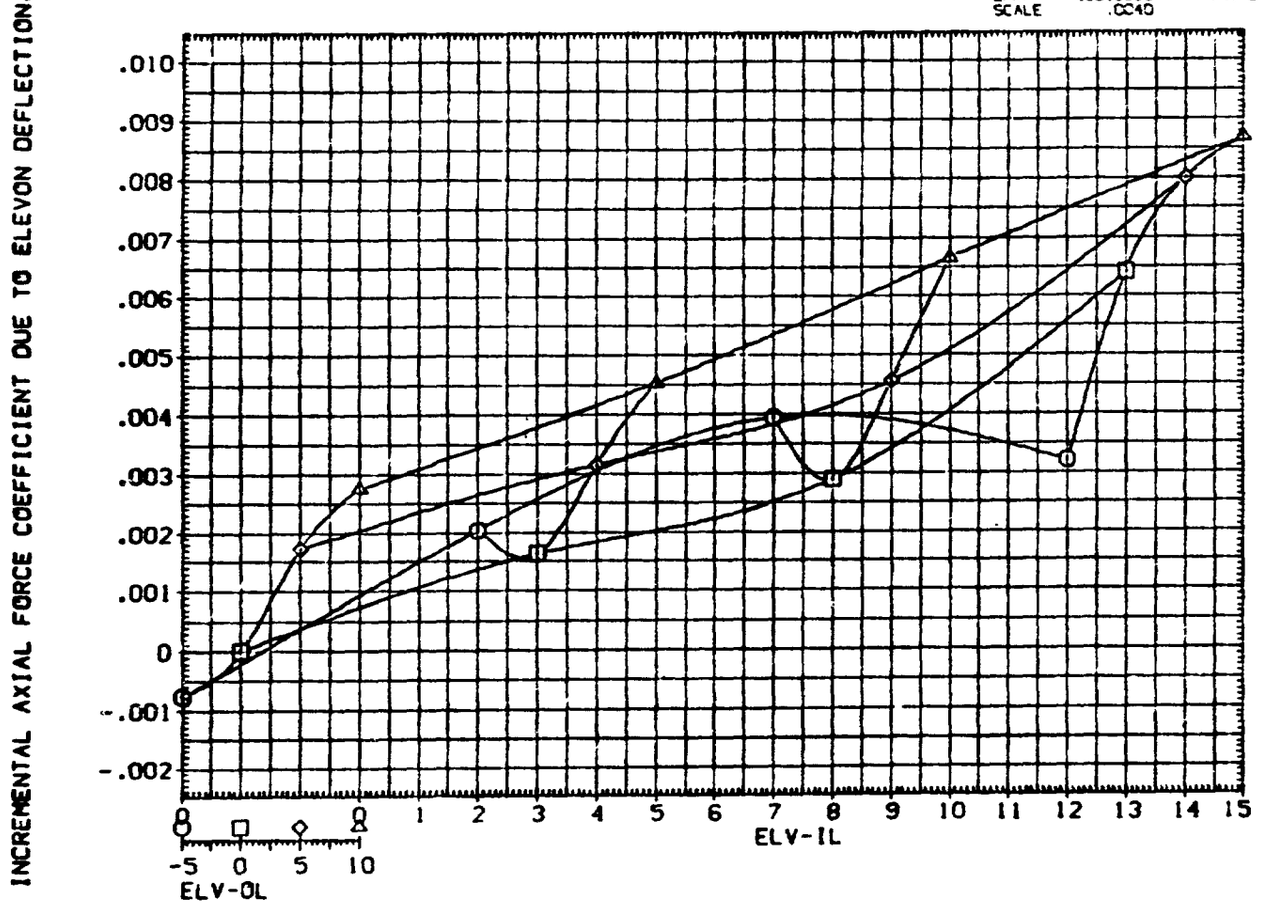
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-8.0 (BINFSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

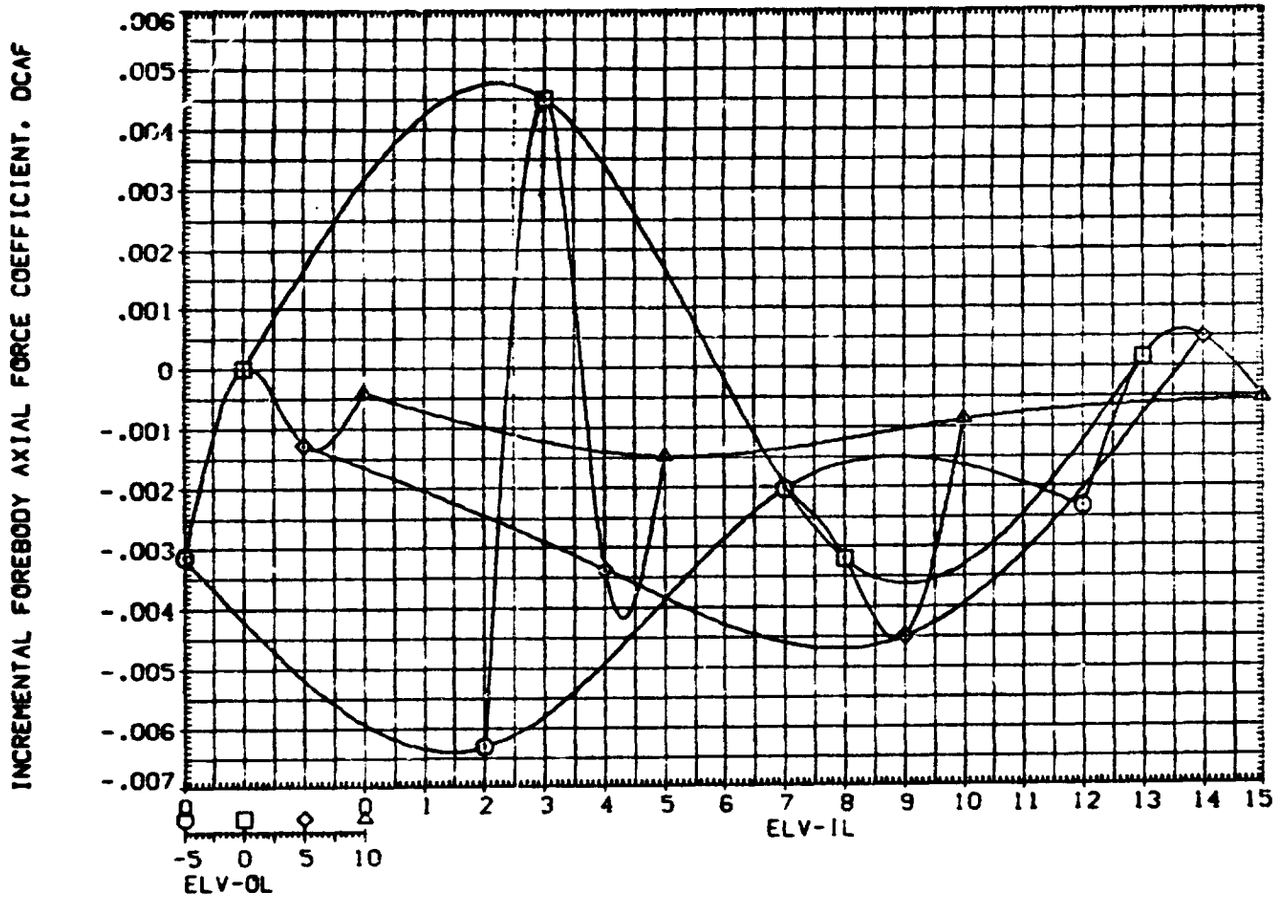
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-8.0 (BINFSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

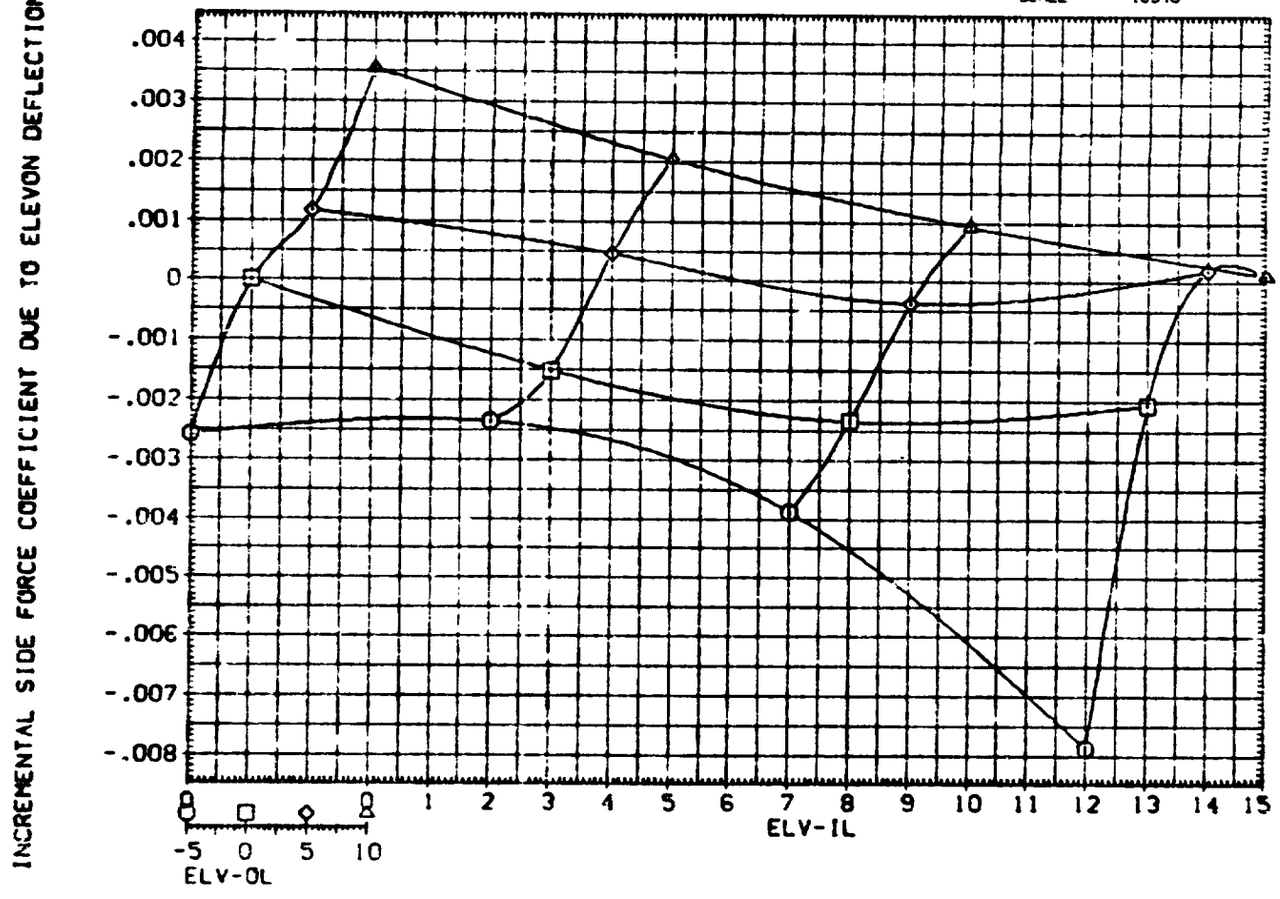
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-8.0 (BINFSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

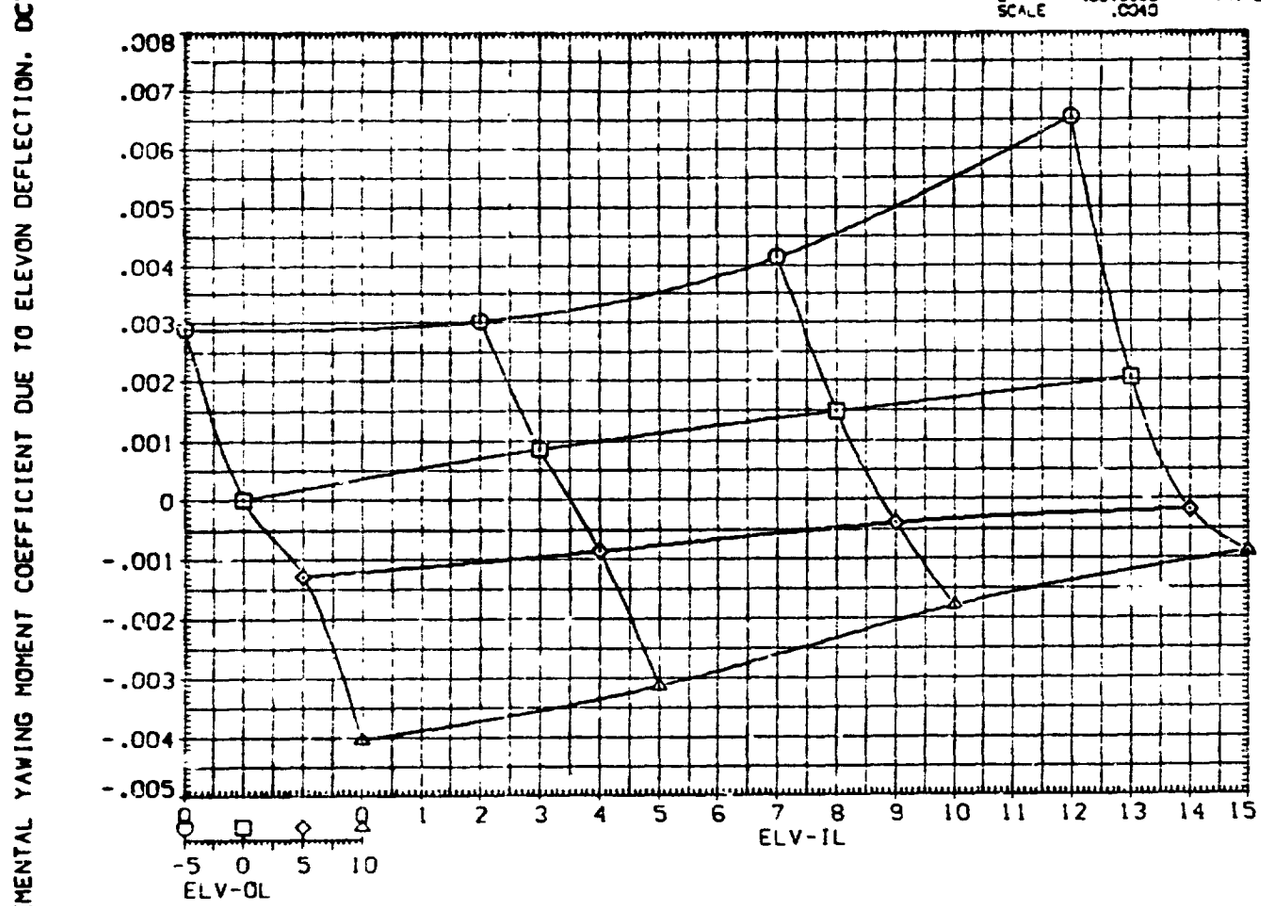
MSFC TWT 622 (:A125) 74 OTS. M=1.46. ALPHA=-8.0 (BINFSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
LREF	290.3000	INCHES
BREF	180.0000	INCHES
XMRP	970.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

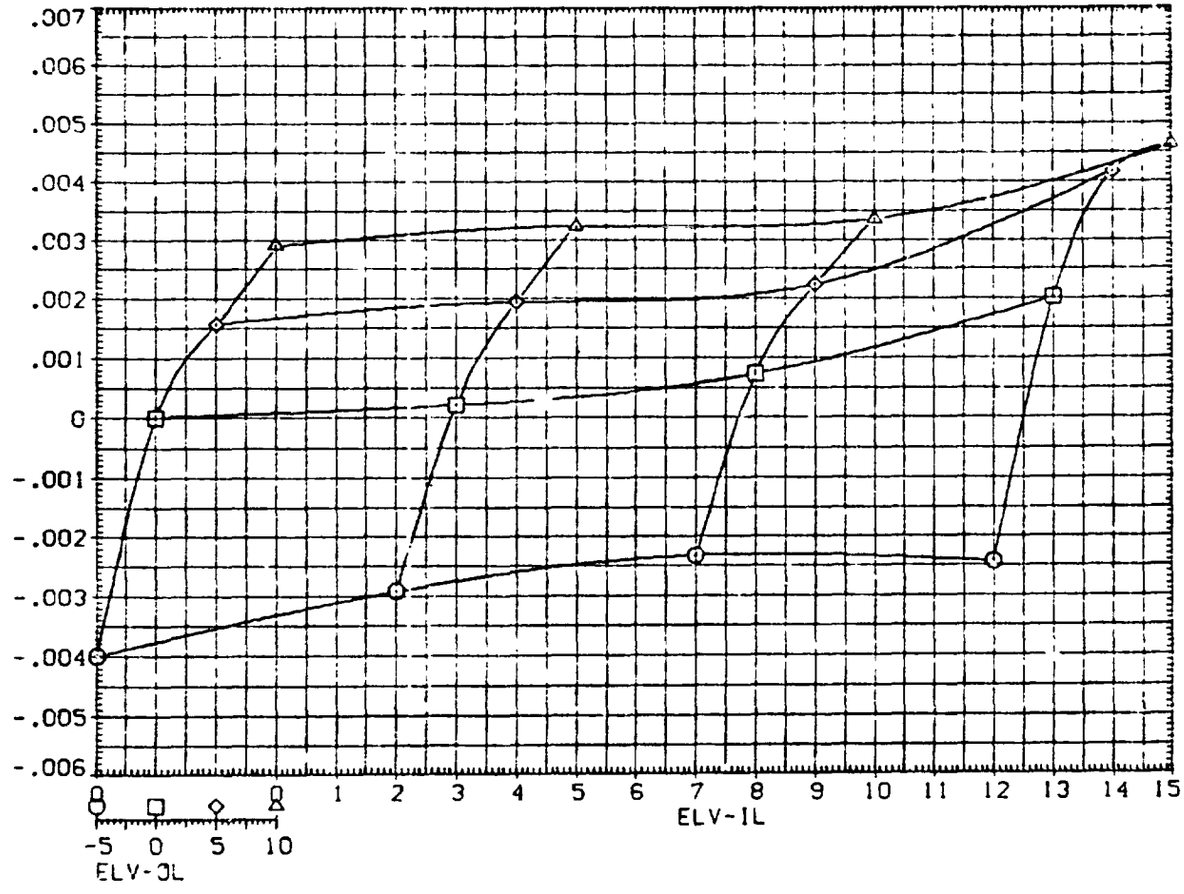
MSFC TWT 622 (IA125) 74 OTS. M=1.46, ALPHA=-8.0 (BINFSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
LREF	[illegible]	INCHES
BREF	[illegible]	INCHES
XMRP	[illegible]	IN. XT
YMRP	[illegible]	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

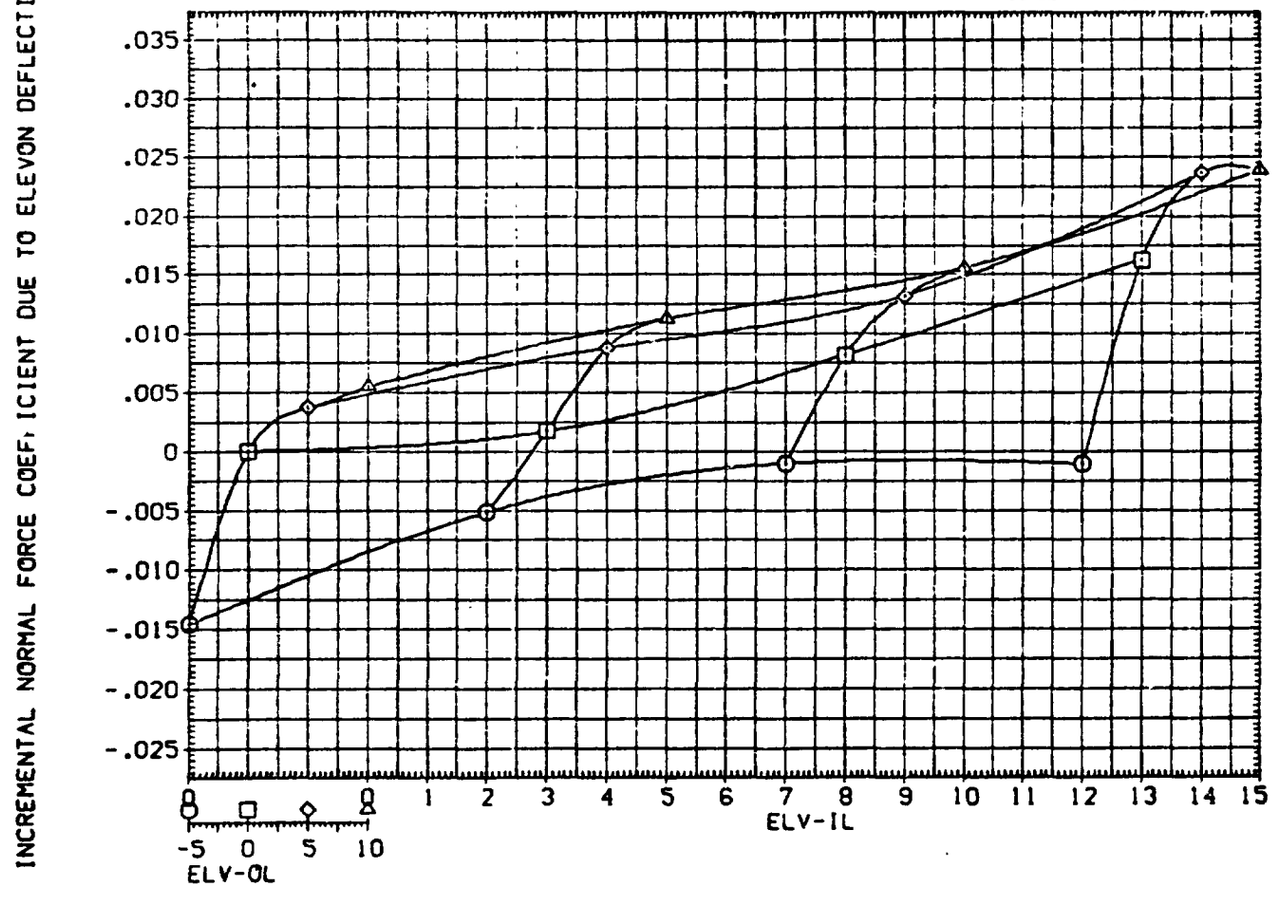
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-6.0 (BINFSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

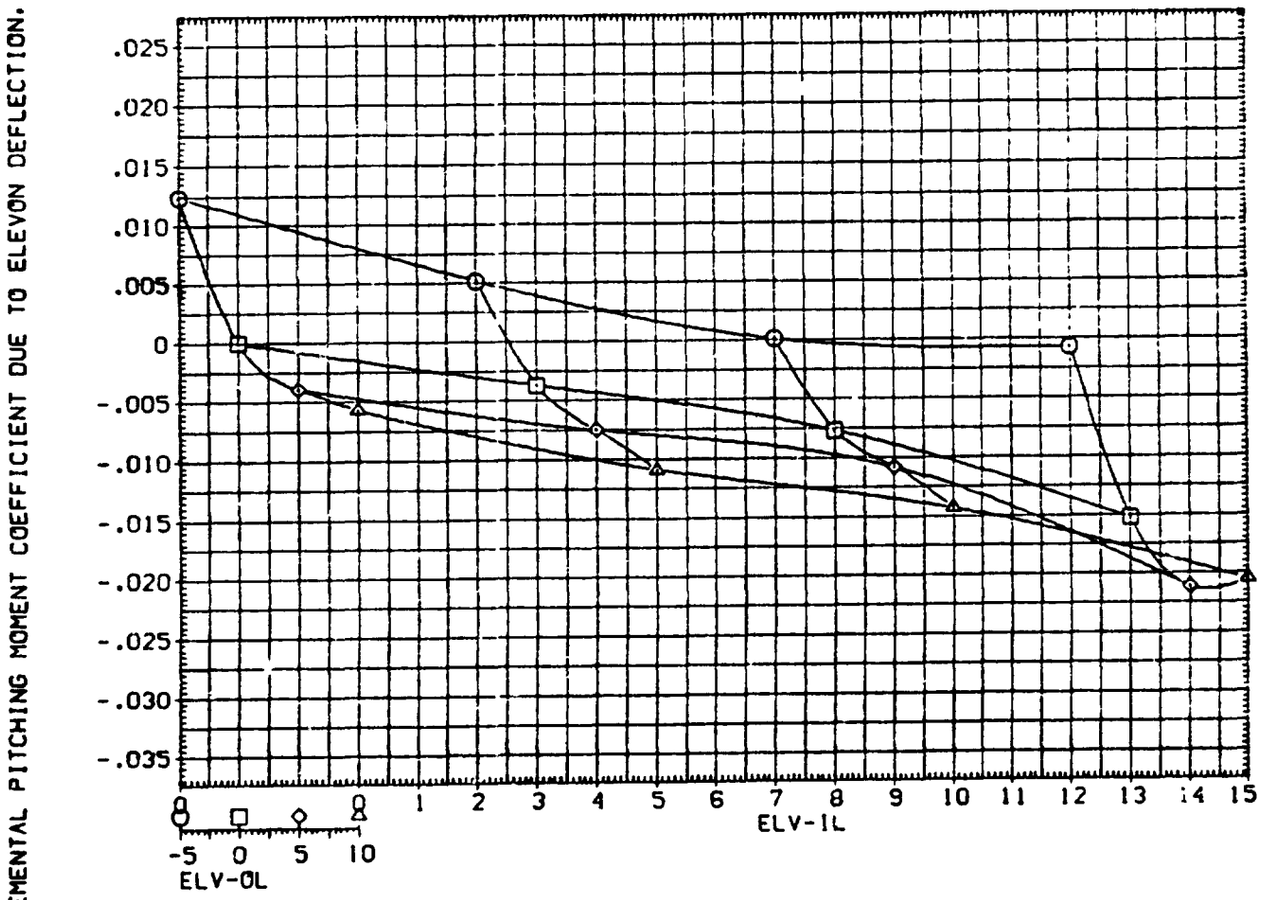
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-6.0 (BINFSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	[illegible]	INCHES
BREF	[illegible]	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

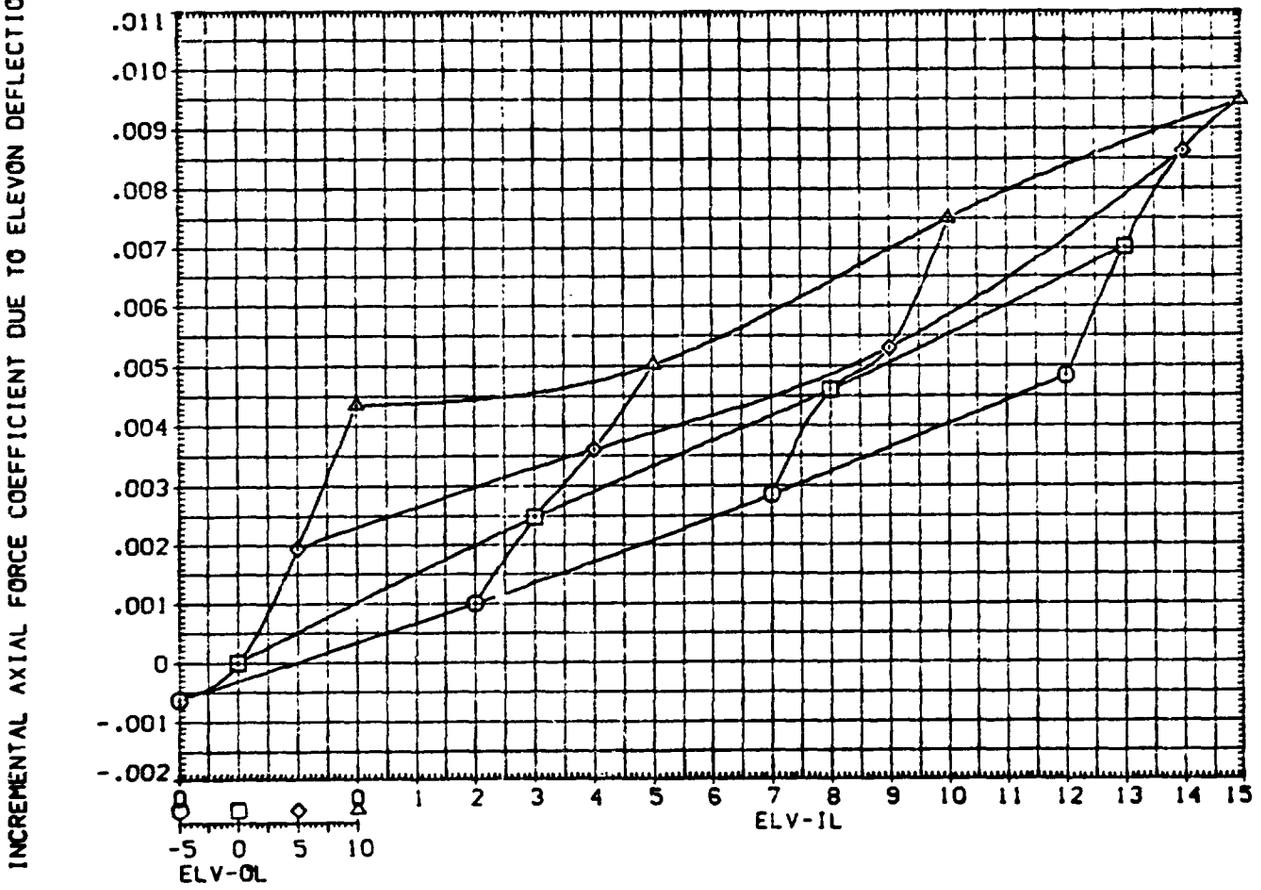
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-6.0 (BINFSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	916.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

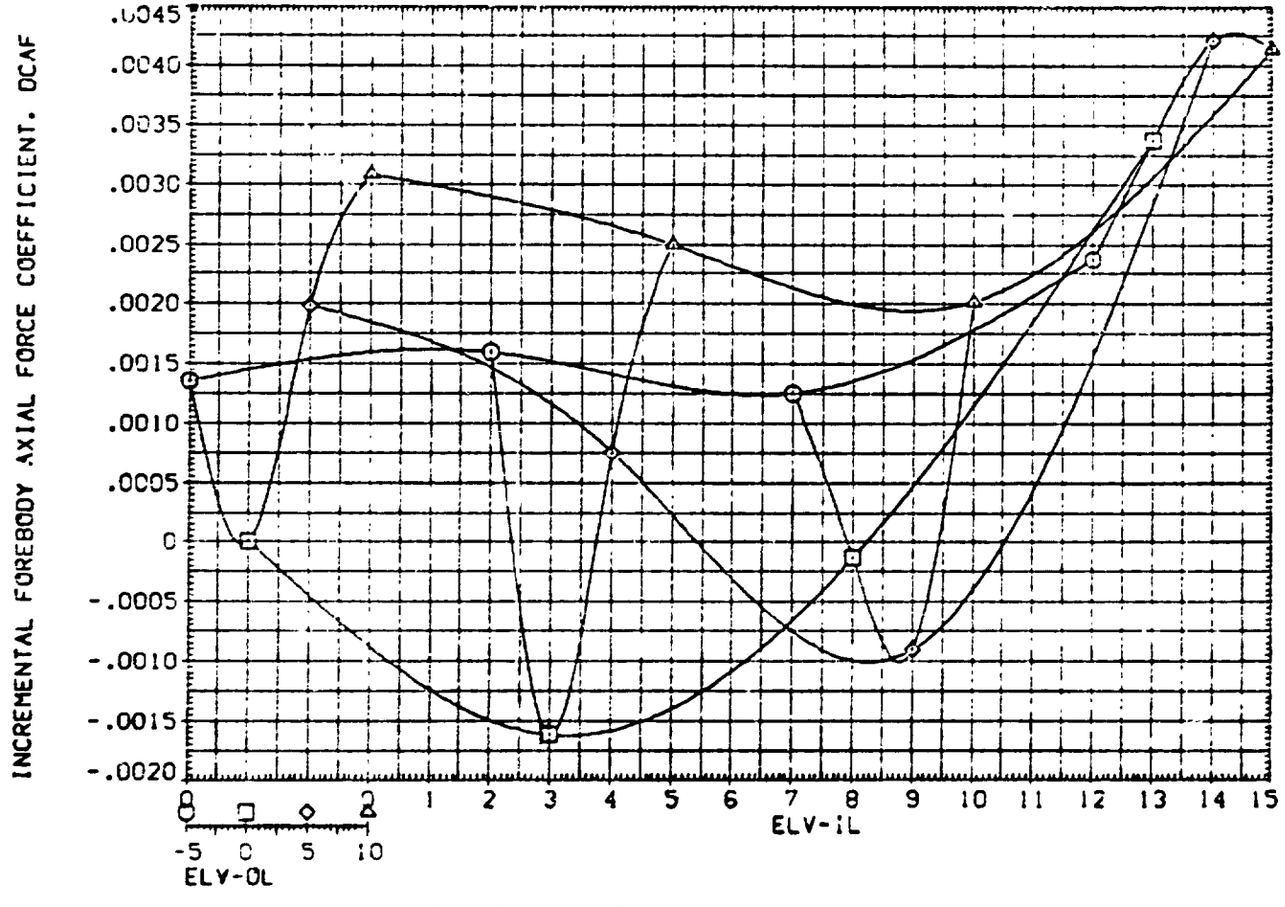
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-6.0 (BINFSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
LREF	[illegible]	[illegible]
BREF	[illegible]	[illegible]
XMRP	976.0000	[illegible]
YMRP	[illegible]	[illegible]
ZMRP	400.0000	[illegible]
SCALE	[illegible]	



ELEVON EFFECTIVENESS FOR MACH = 1.46

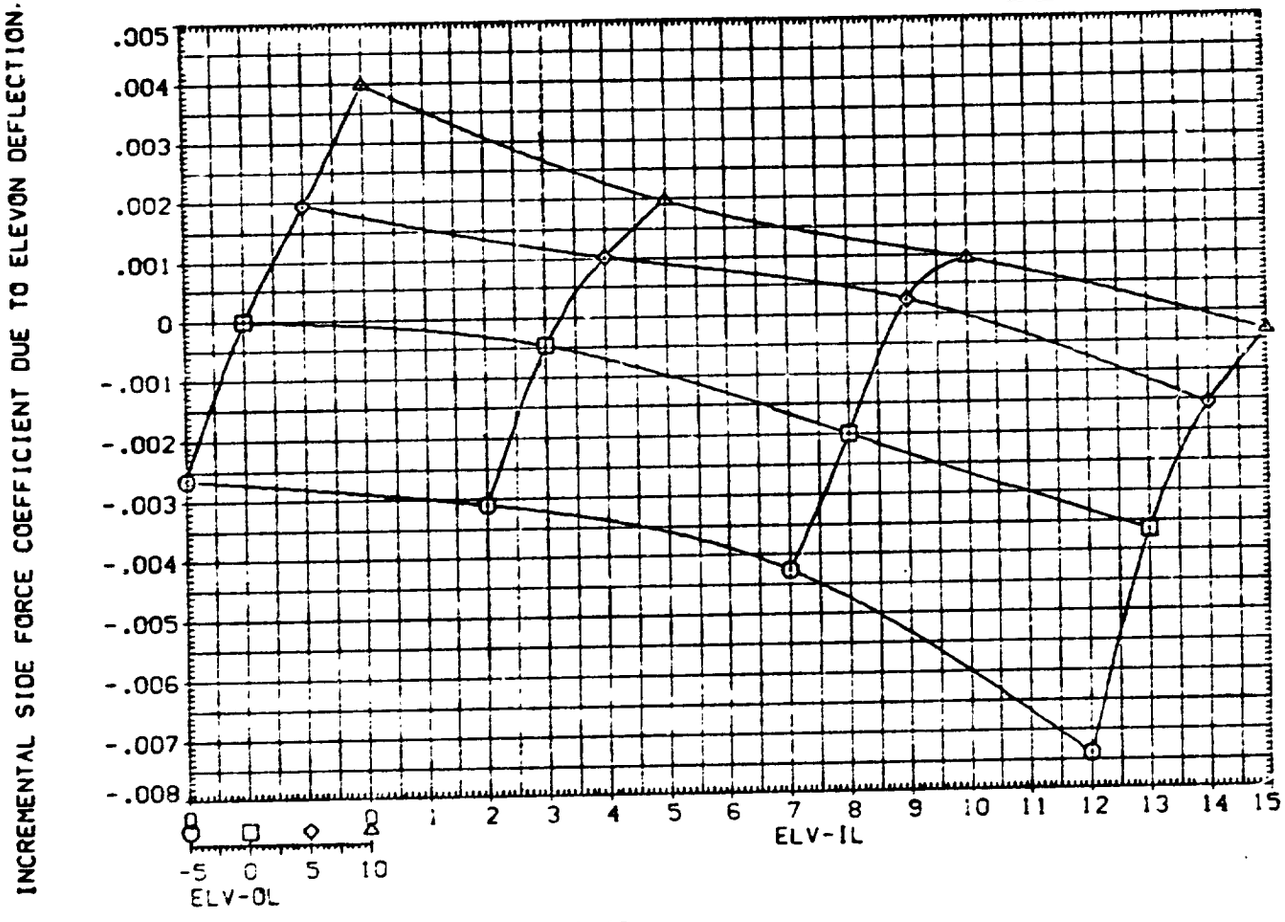
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-6.0 (BINFSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2693.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

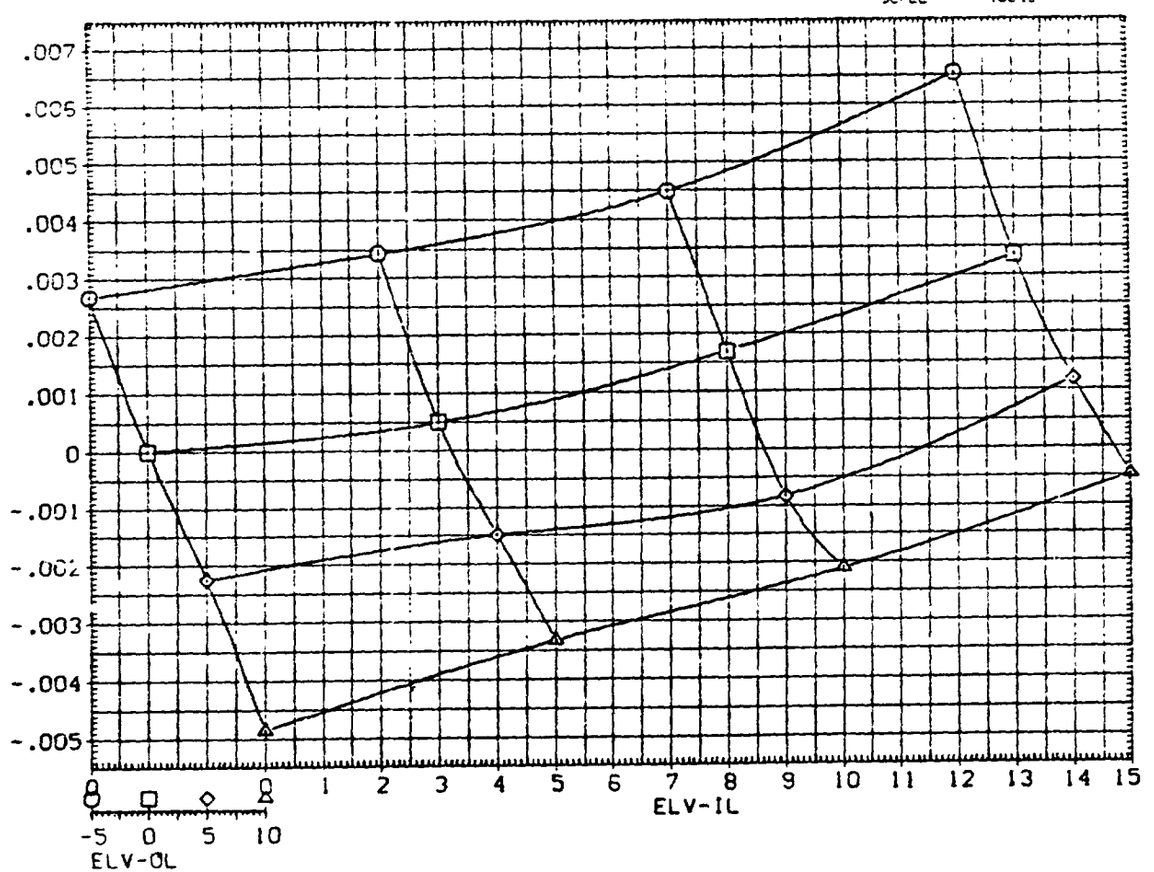
MSFC TWT 622 (1A125) 74 OTS. M=1.46. ALPHA=-6.0 (B1NFSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2692.0000	SQ. FT
LREF	1500.0000	INCHES
BREF	1501.3000	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

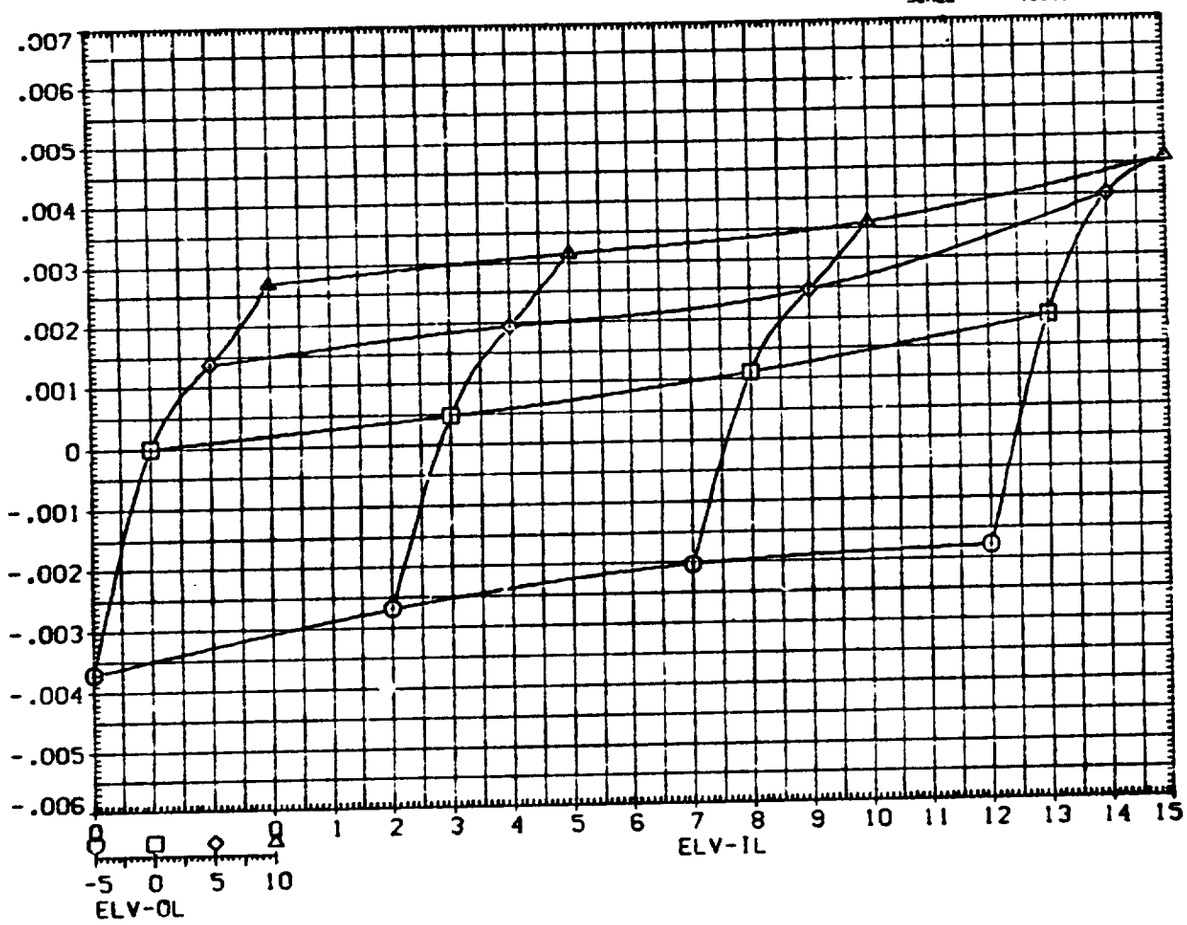
MSFC TWT 622 (IA125) 74 OTS. M=1.46, ALPHA=-6.0 (BINFSC)

PARAMETRIC VALUES

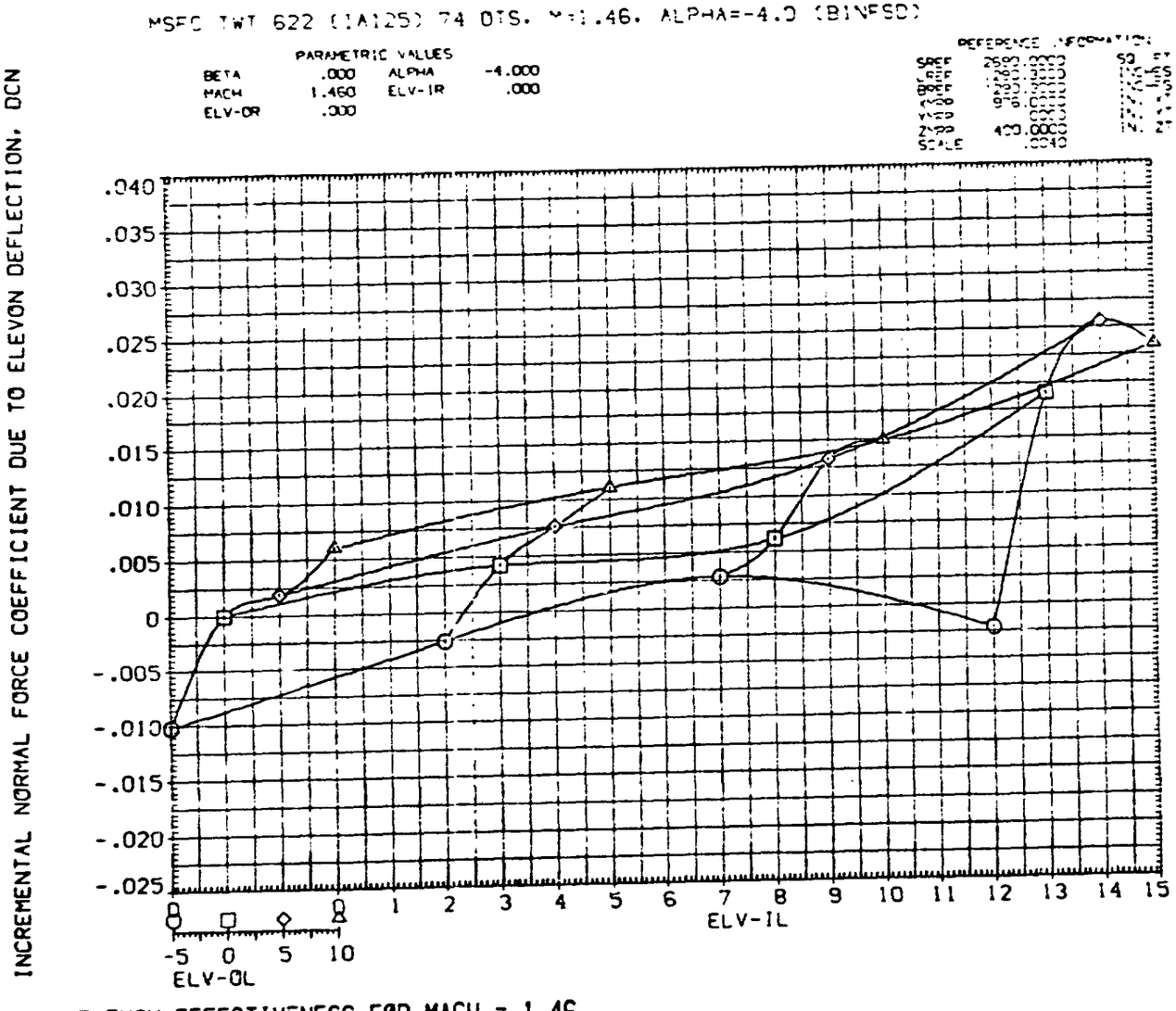
BETA	.000	ALPHA	-6.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46



ELEVON EFFECTIVENESS FOR MACH = 1.46

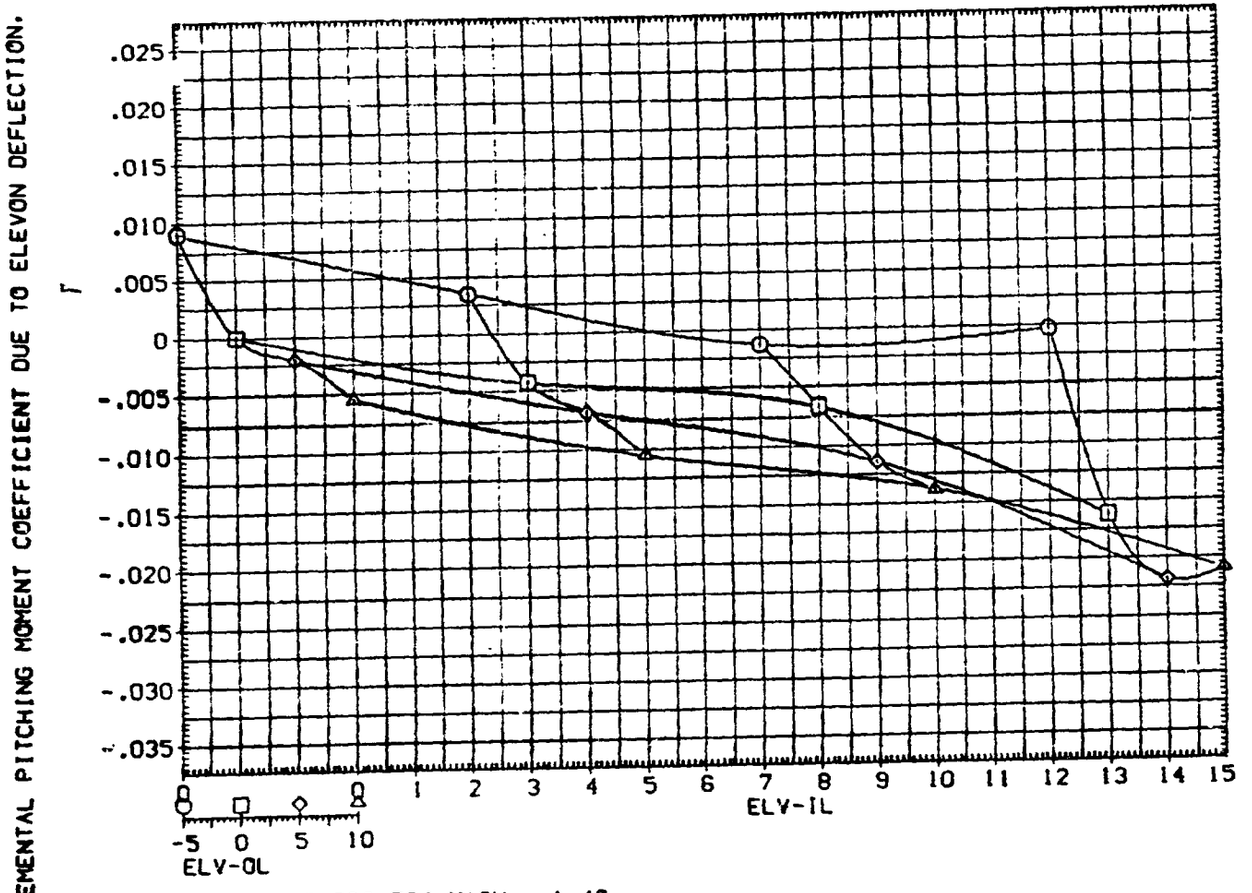
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-4.0 (BINFSD)

PARAMETRIC VALUES

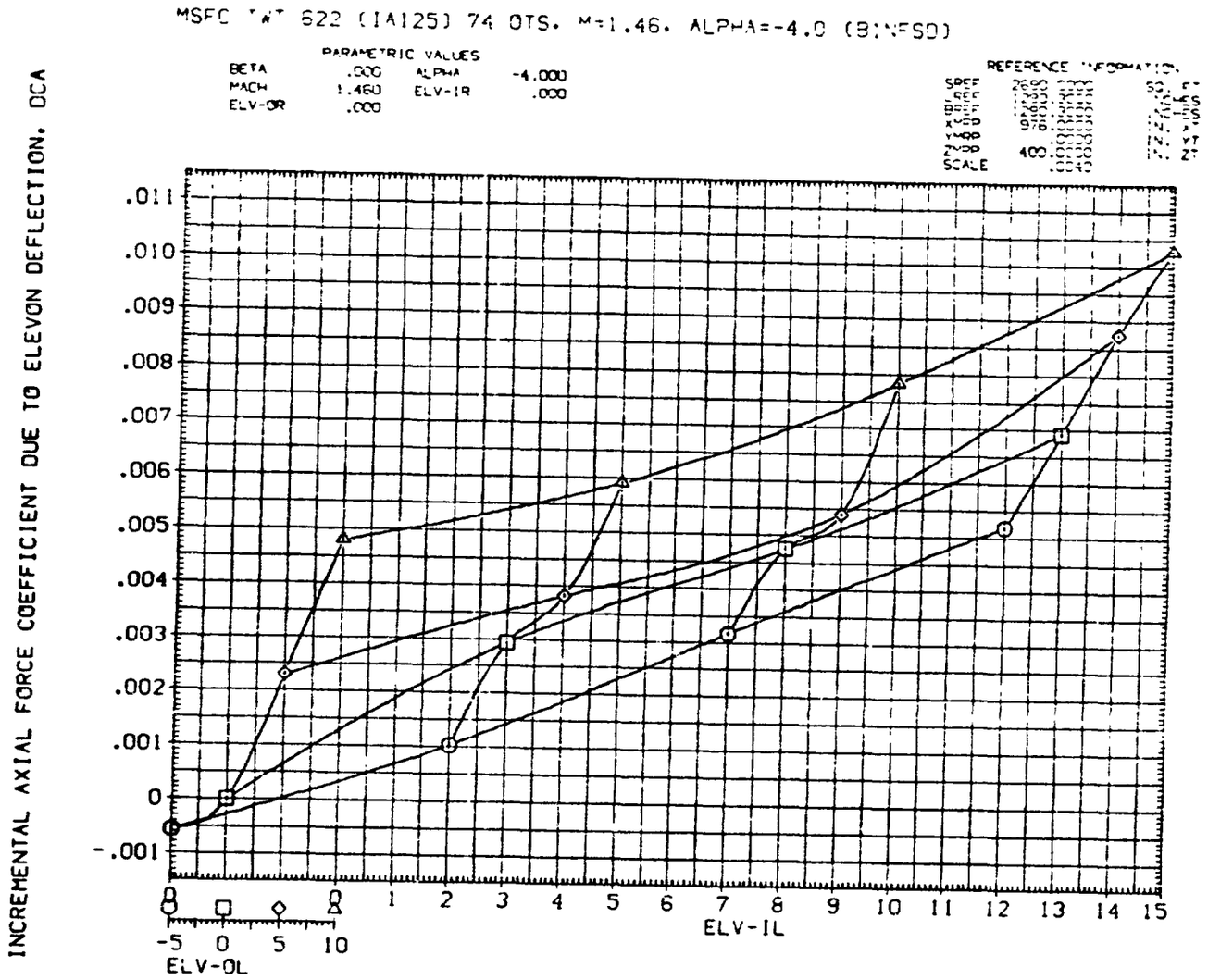
BETA	.000	ALPHA	-4.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46



ELEVON EFFECTIVENESS FOR MACH = 1.46

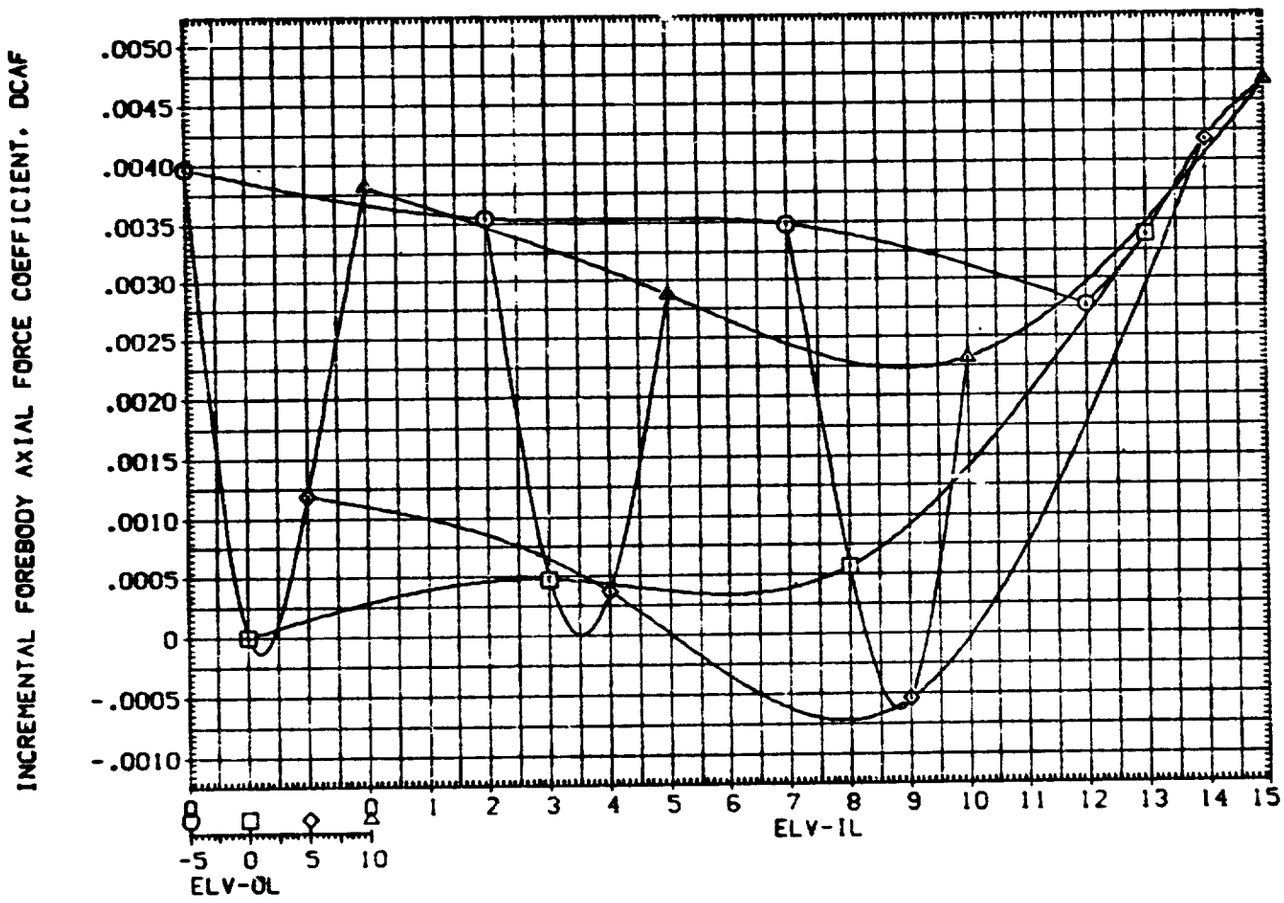
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-4.0 (BINFSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

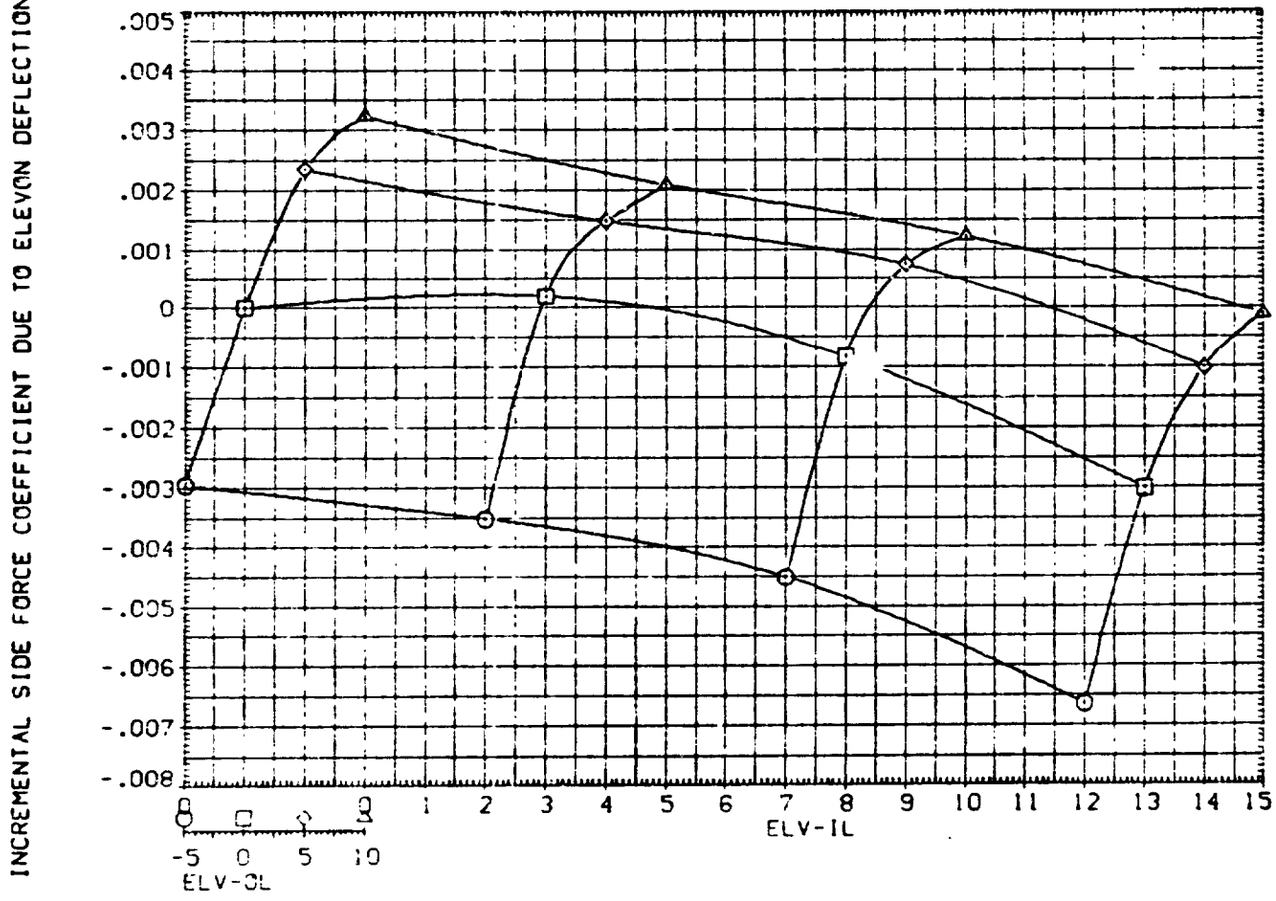
MSFC TAT 622 (IA125) 74 CTS. M=1.46, ALPHA=-4.0 (BINFSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	[illegible]	SQ. FT
CREF	[illegible]	INCHES
BREF	[illegible]	INCHES
XMRP	[illegible]	[illegible]
YMRP	[illegible]	[illegible]
ZMRP	400.[illegible]	[illegible]
SCALE	[illegible]	



ELEVON EFFECTIVENESS FOR MACH = 1.46

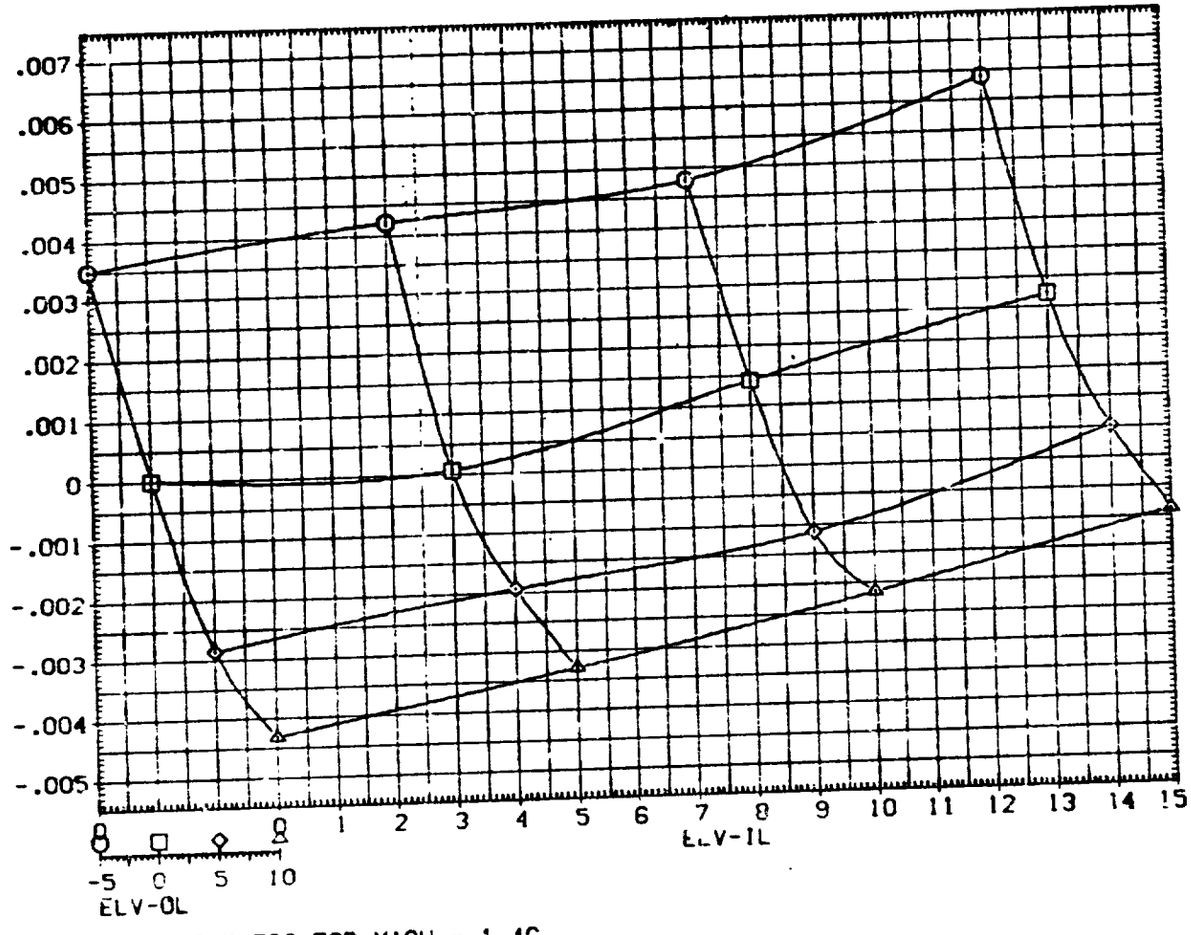
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-4.0 (BINFSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1280.0000	INCHES
BREF	1280.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

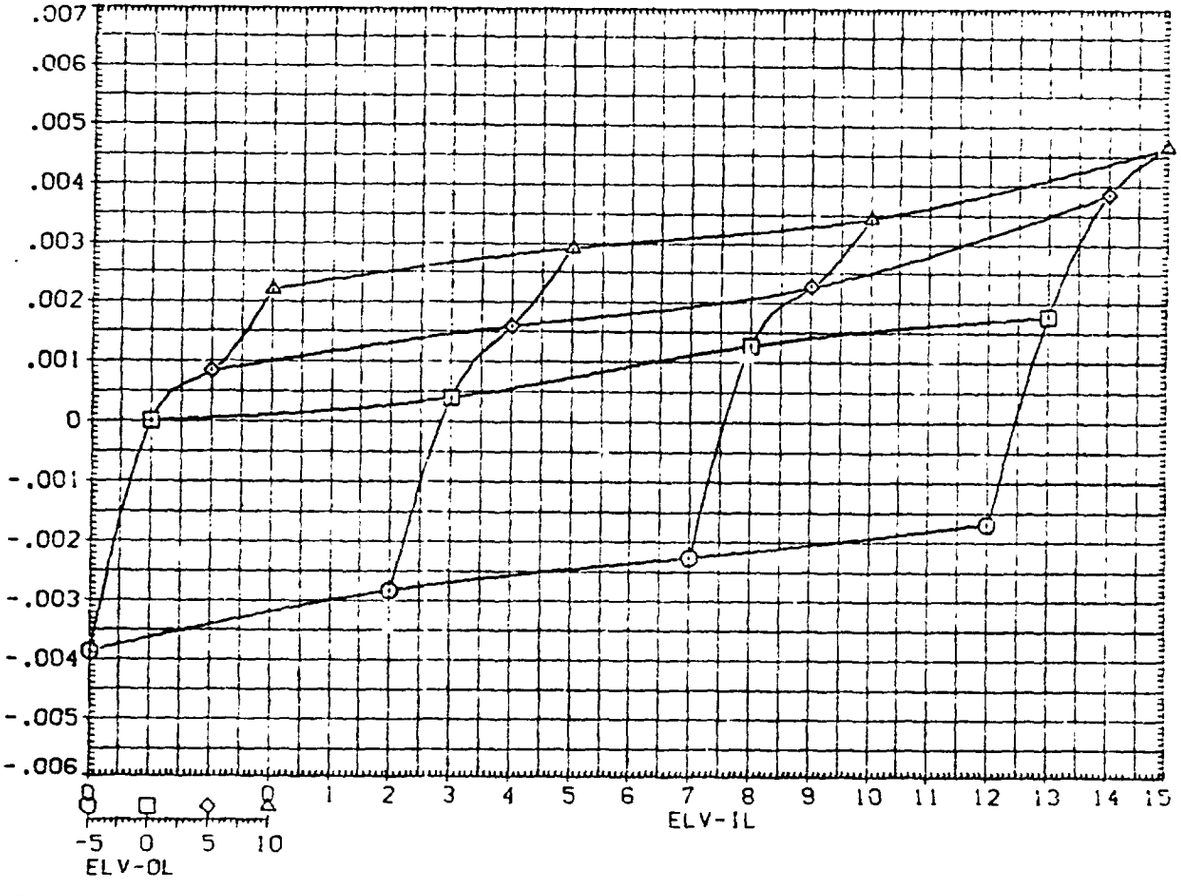
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-4.0 (BINFSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
CREF	1190.0000	INCHES
BREF	[illegible]	[illegible]
XMRP	976.0000	[illegible]
YMRP	.0000	[illegible]
ZMRP	400.0000	[illegible]
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

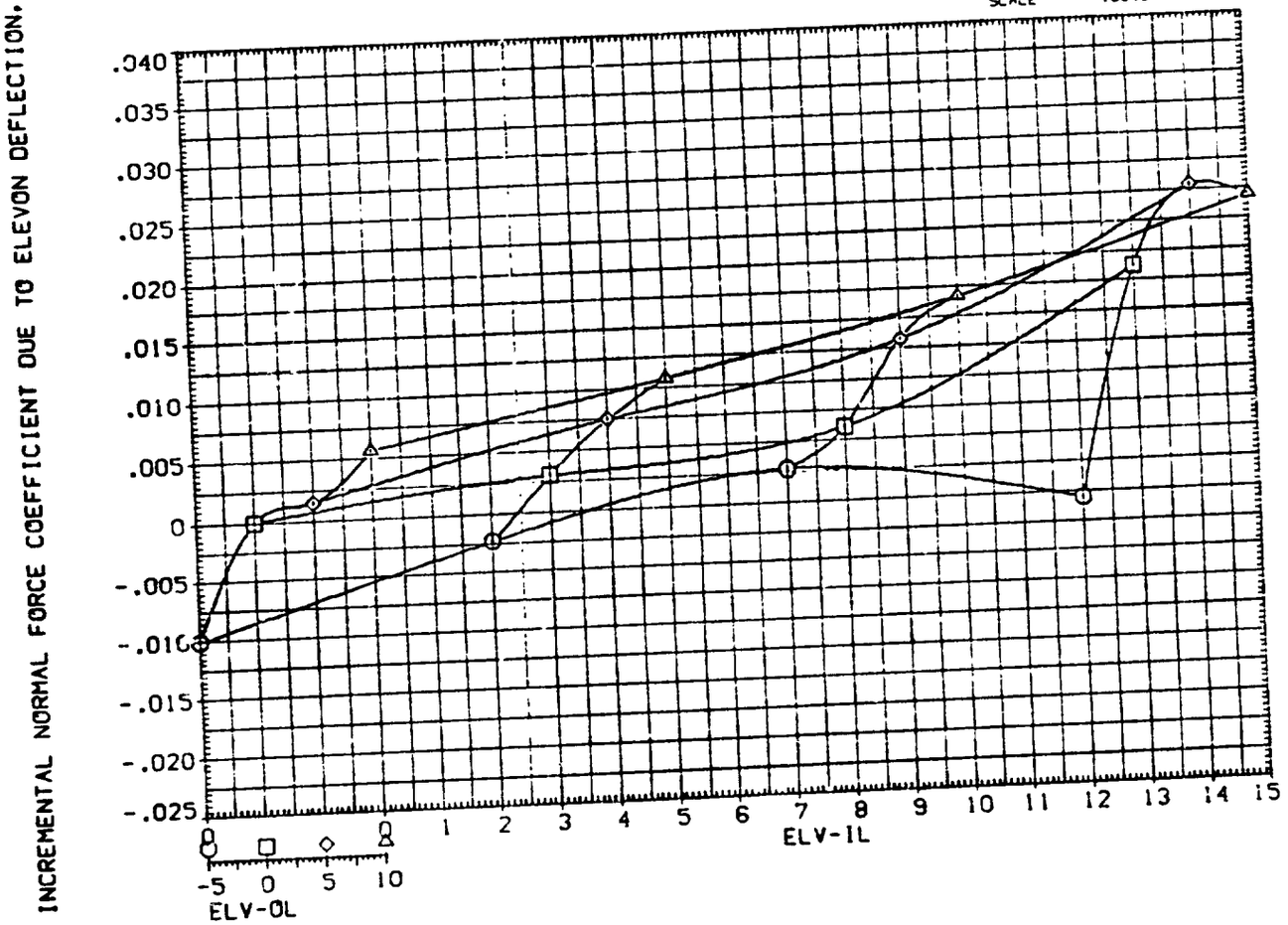
MSFC TWT 622 (IA125) 74 OTS, M=1.46, ALPHA=-2.0 (B!NFSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

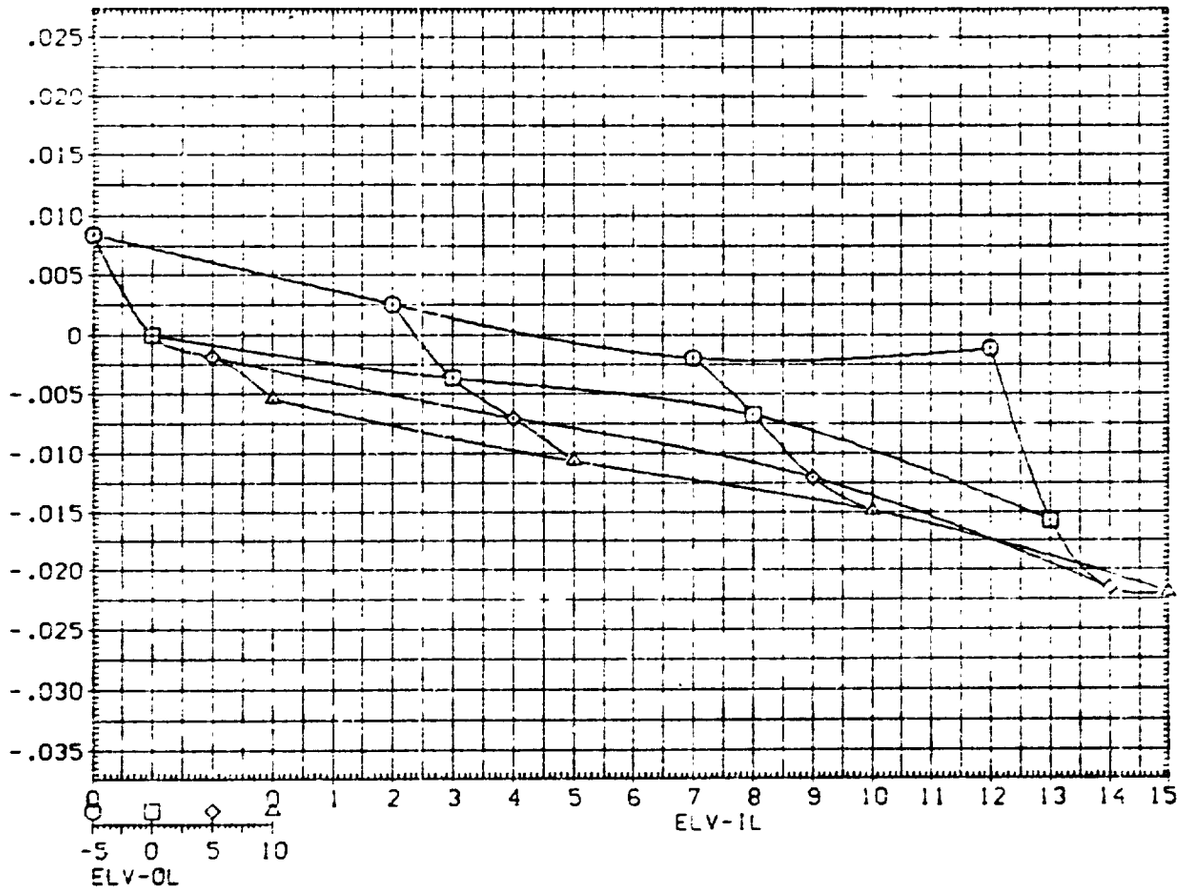
MSFC TWT 622 (IA125) 74 OTS. M=1.46, ALPHA=-2.0 (BINFSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

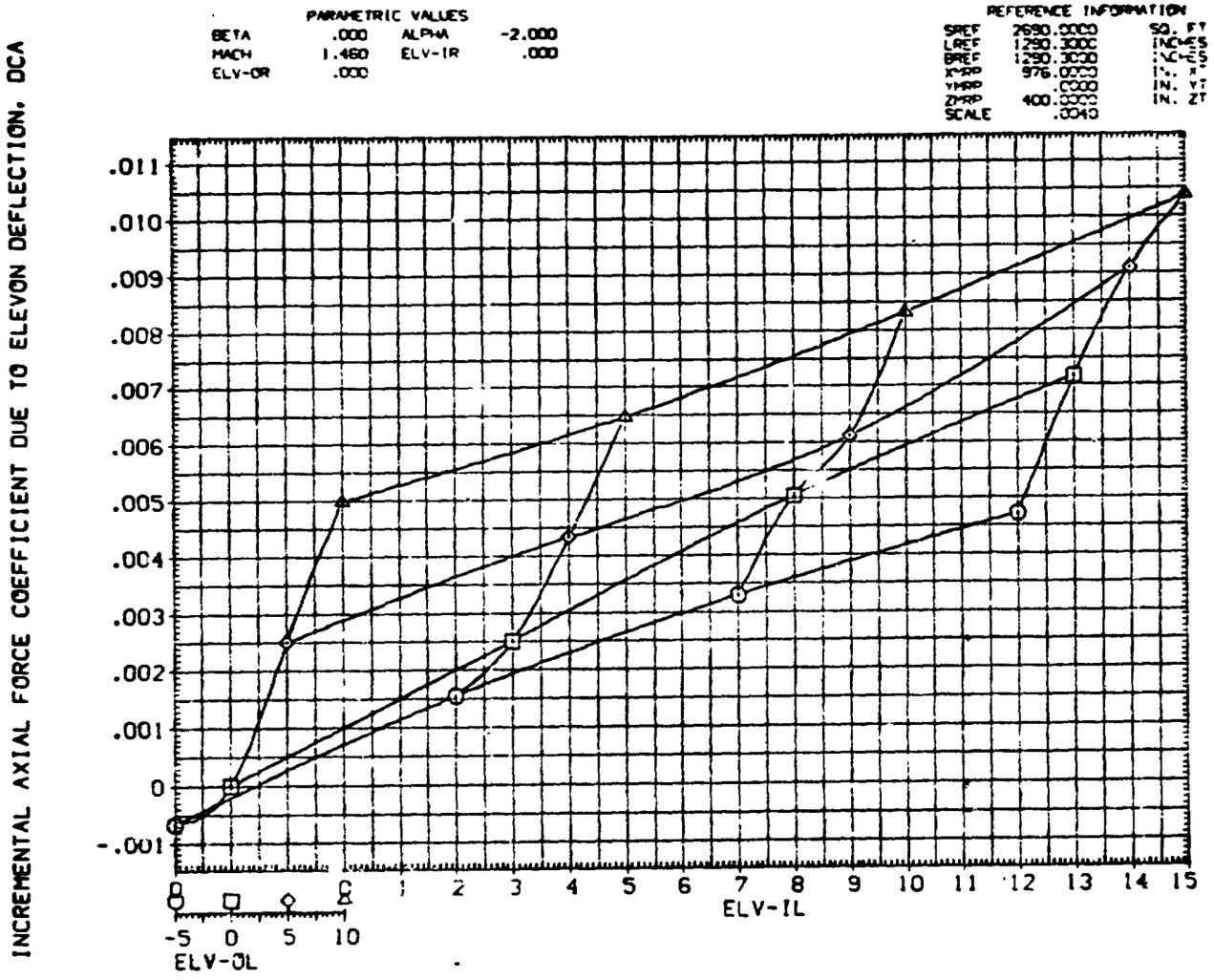
REFERENCE INFORMATION

SREF	2630.0000	SQ. FT
BREF	[illegible]	INCHES
CREF	[illegible]	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-2.0 (BINFSE)



ELEVON EFFECTIVENESS FOR MACH = 1.46

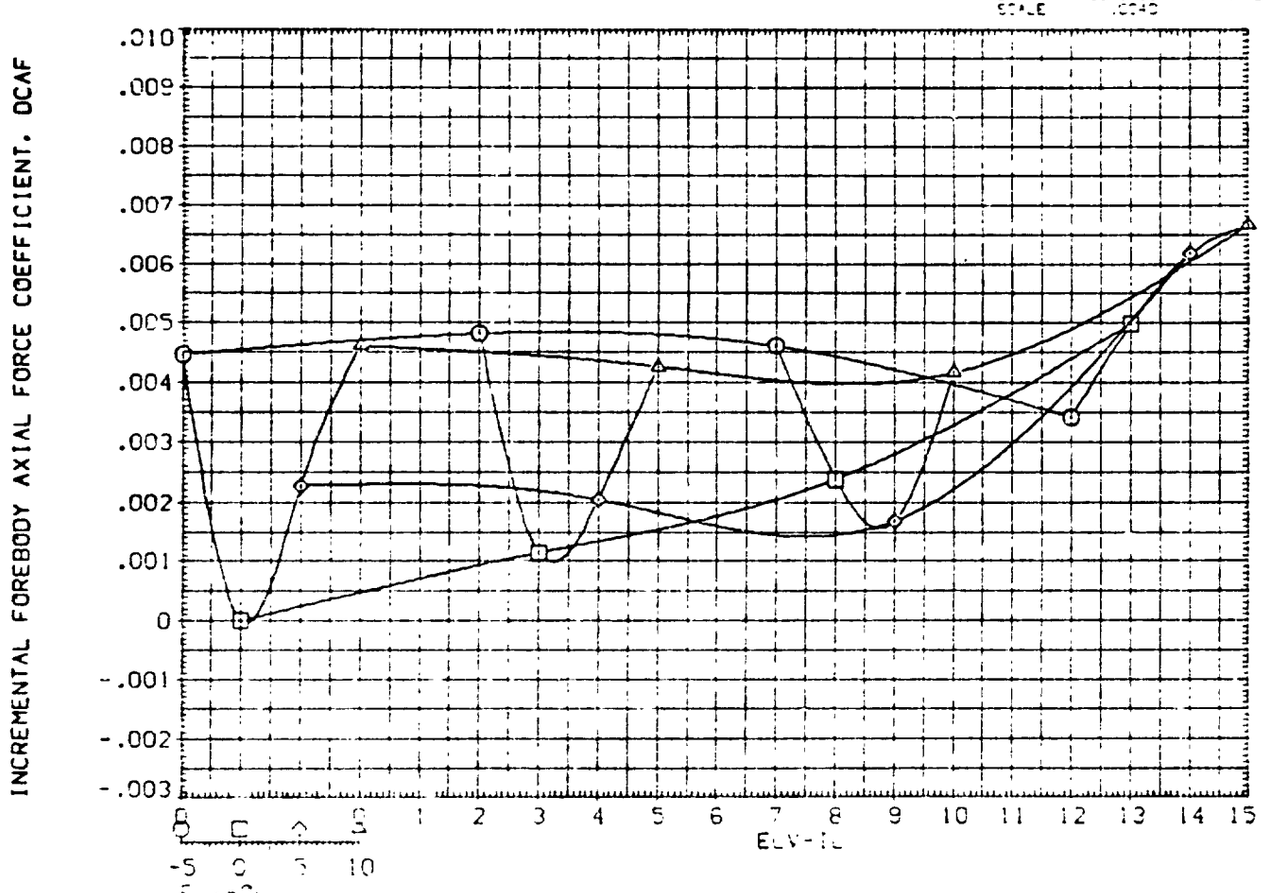
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-2.0 (BINFSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0000	



ELEVON EFFECTIVENESS FOR MACH = 1.46

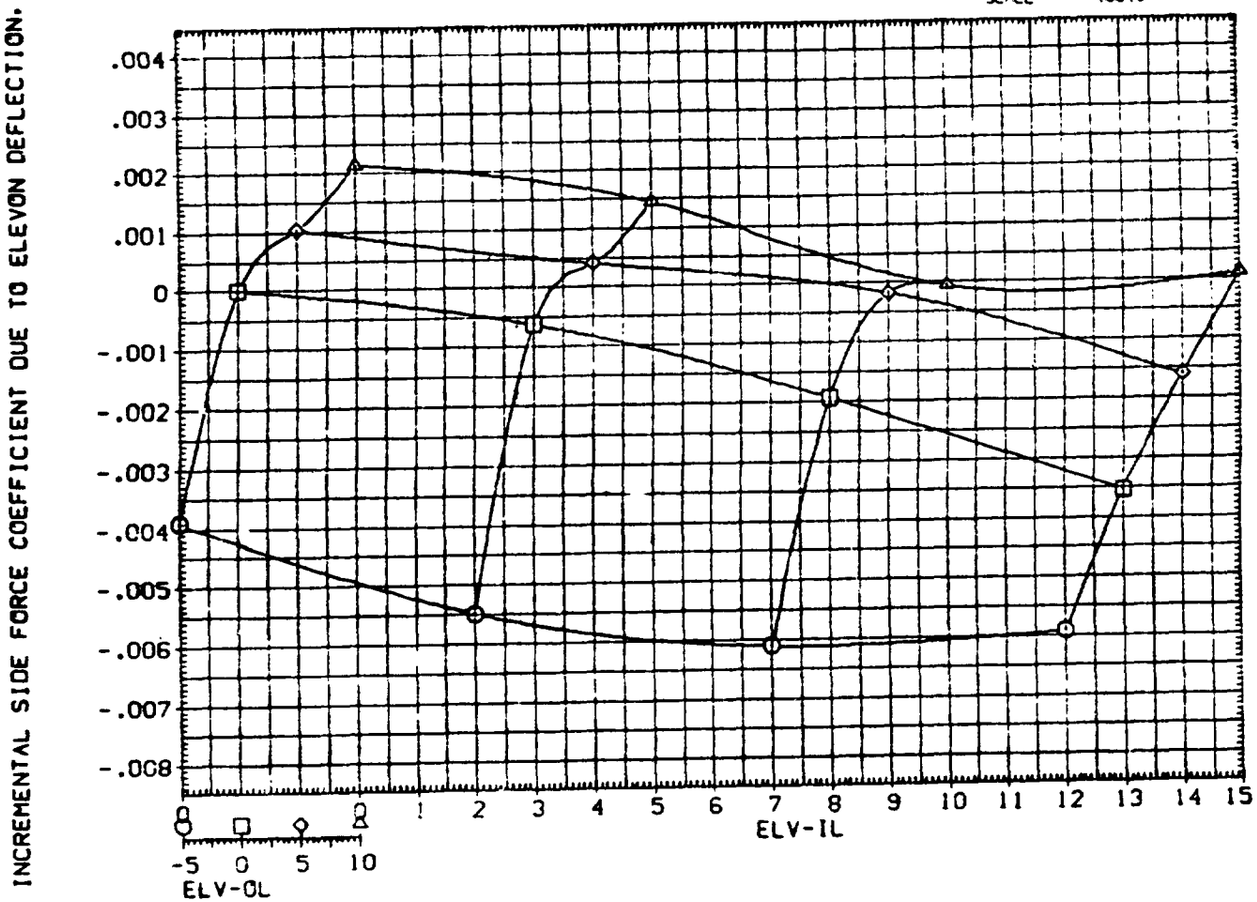
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-2.0 (B1NFSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

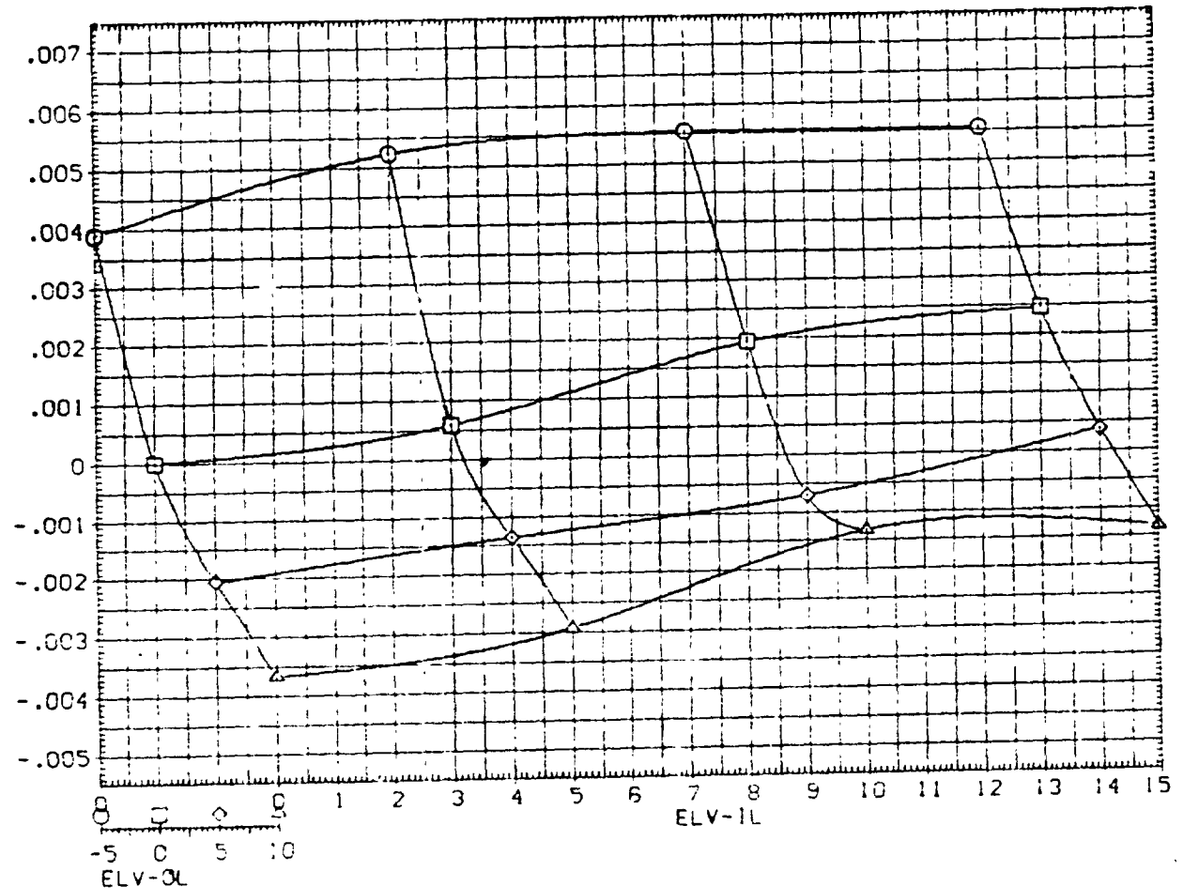
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-2.0 (BINFSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	1.460	ELV-1R	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	910.0000	XT
YMRP	.0000	YT
ZMRP	400.0000	ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

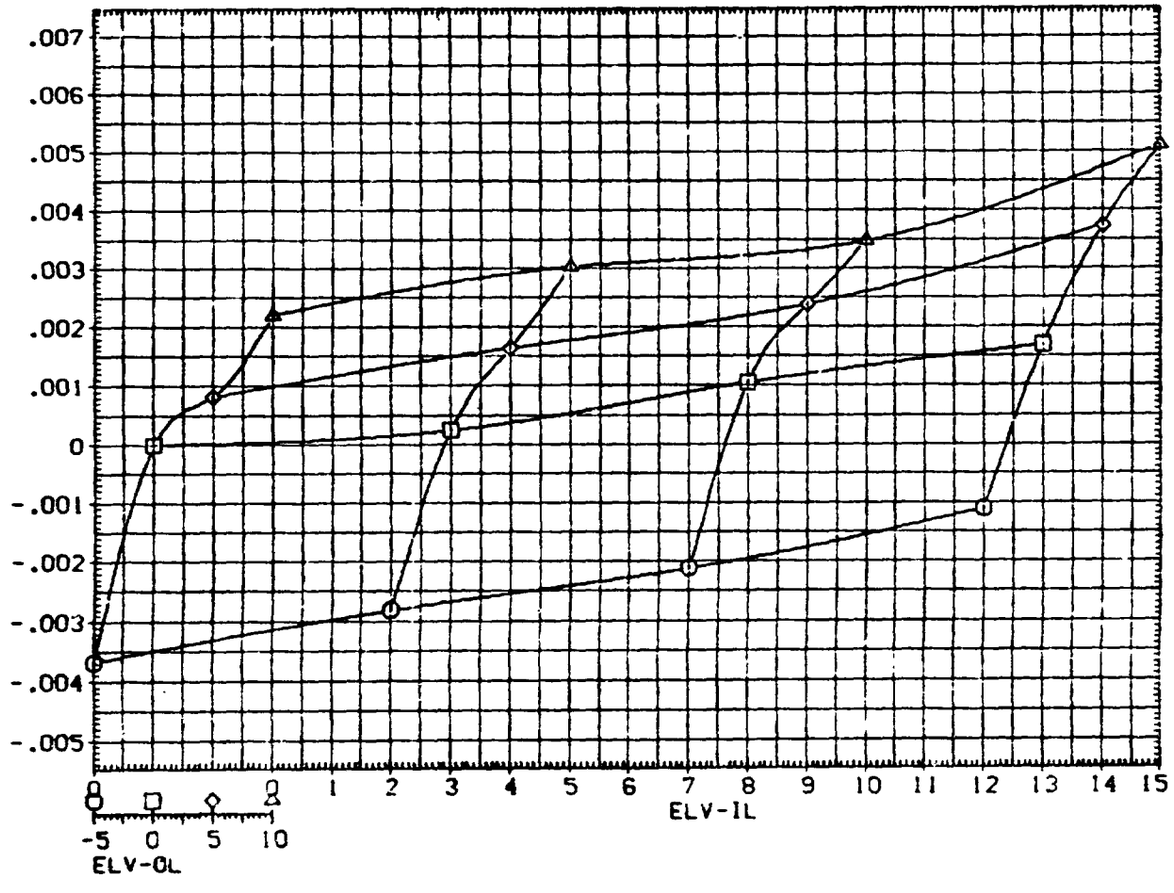
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA=-2.0 (B1NFSE)

PARAMETRIC VALUES

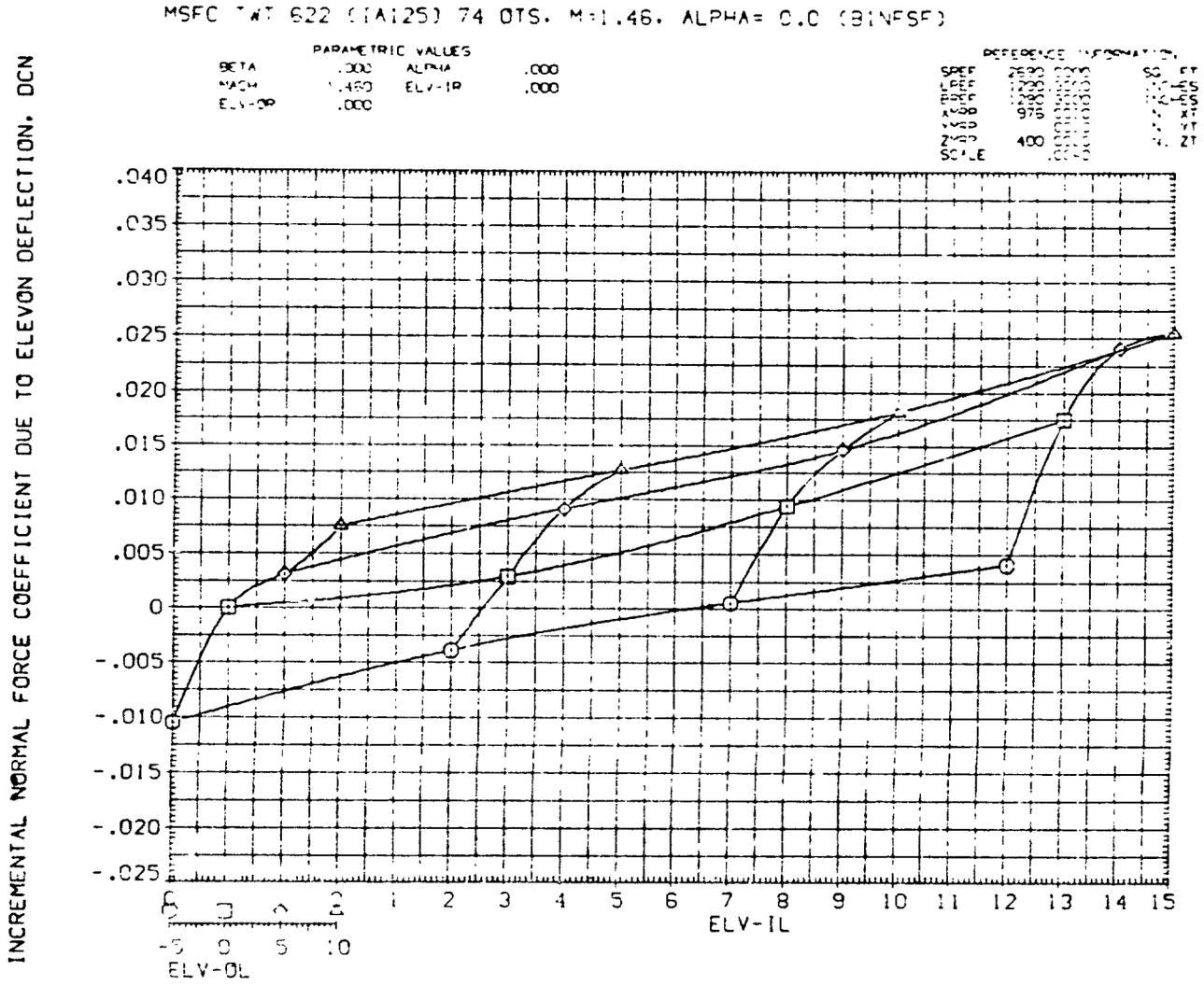
BETA	.000	ALPHA	-2.000
MACH	1.460	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46



ELEVON EFFECTIVENESS FOR MACH = 1.46

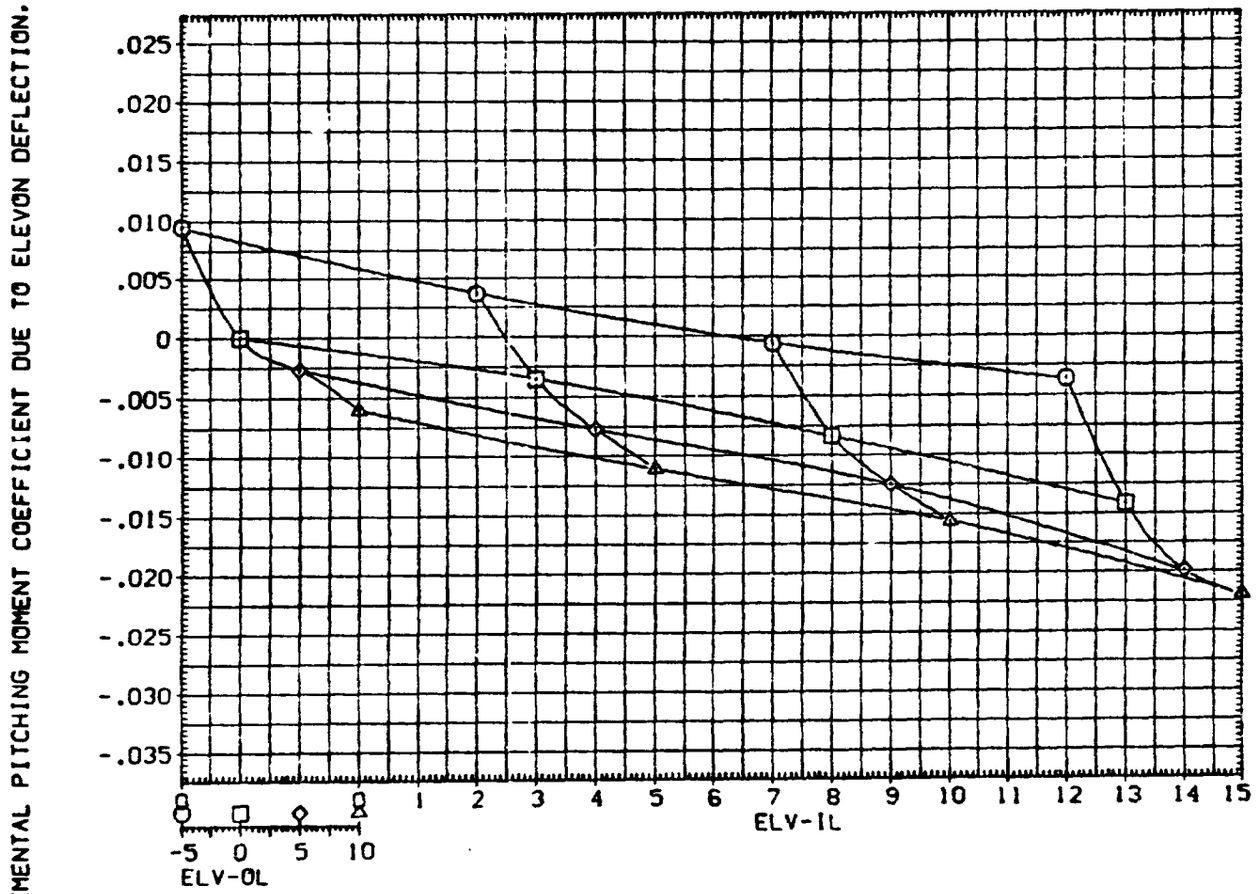
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 0.0 (BINFSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.460	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

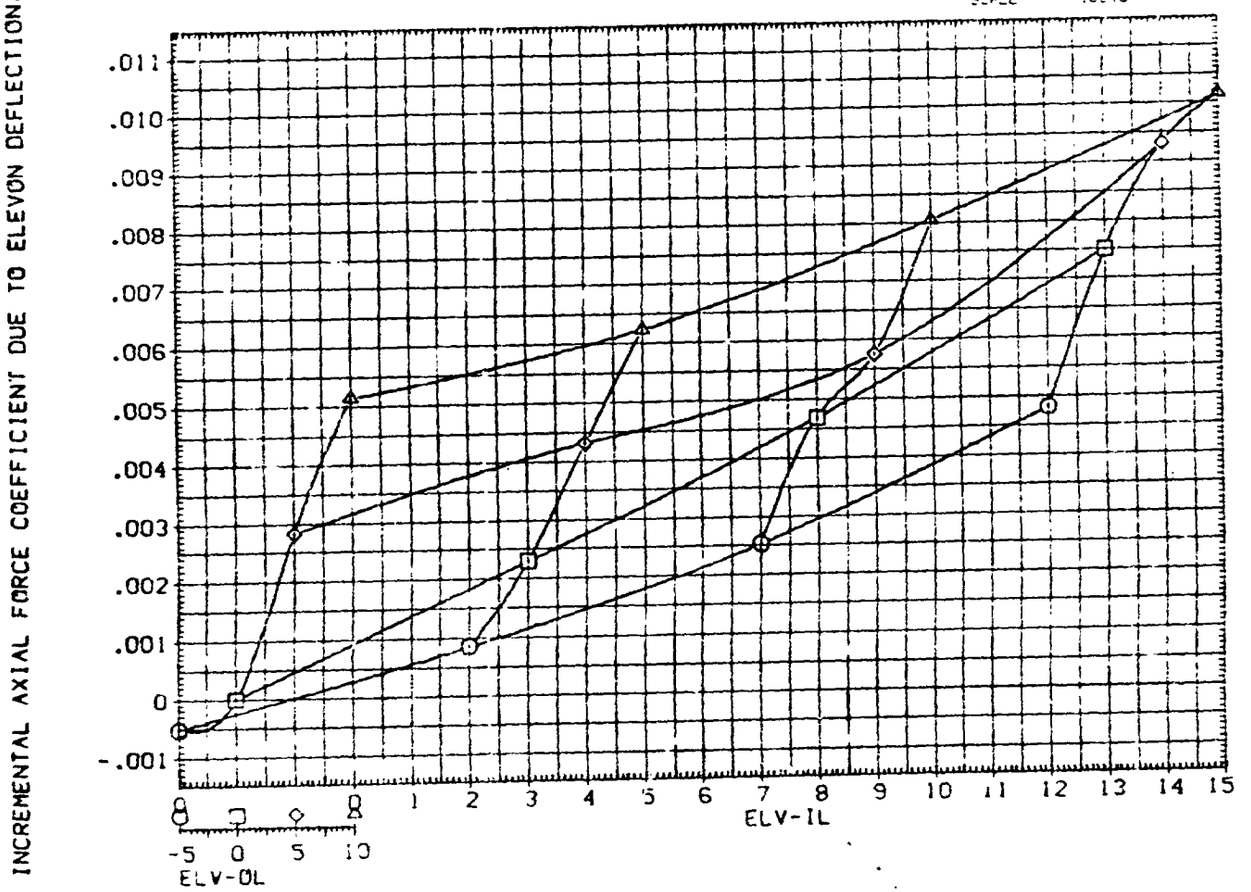
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 0.0 (BINFSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1200.0000	INCHES
BREF	1200.0000	INCHES
XMOM	960.0000	IN. XT
YMOM	.0000	IN. YT
ZMOM	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

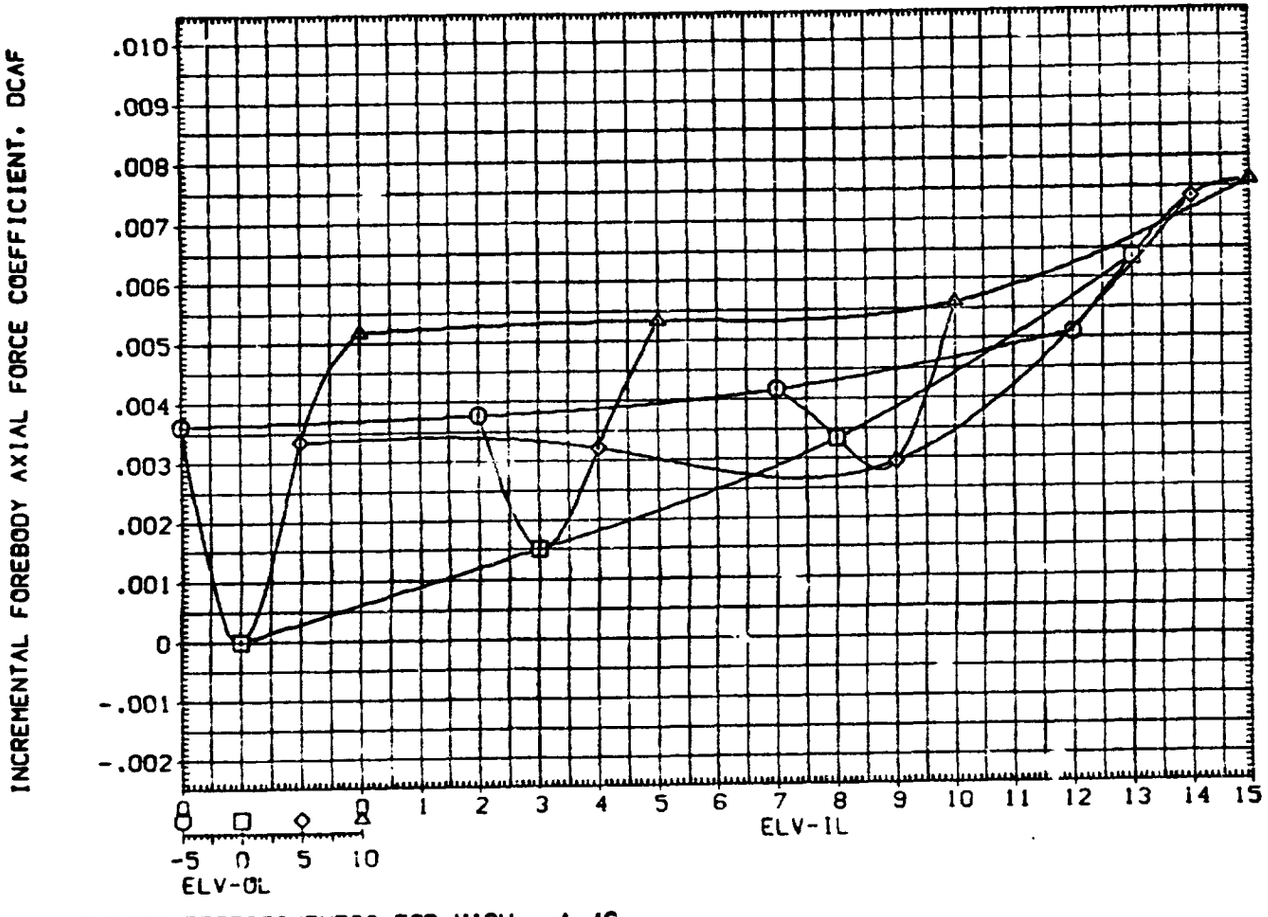
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 0.0 (B1NFSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

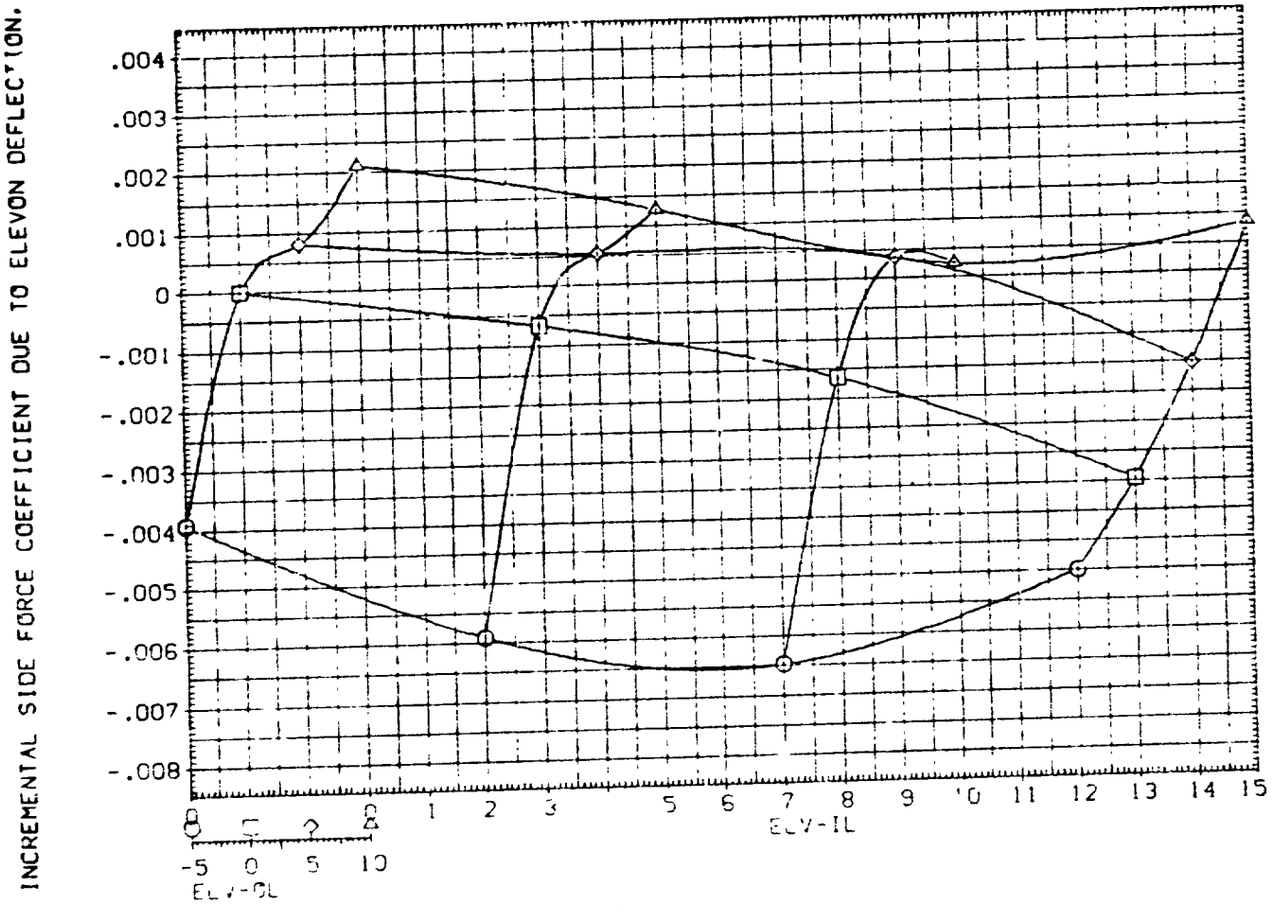
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 0.0 (BINFSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1200.0000	INCHES
BREF	1200.0000	INCHES
XMRP	970.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0240	



ELEVON EFFECTIVENESS FOR MACH = 1.46

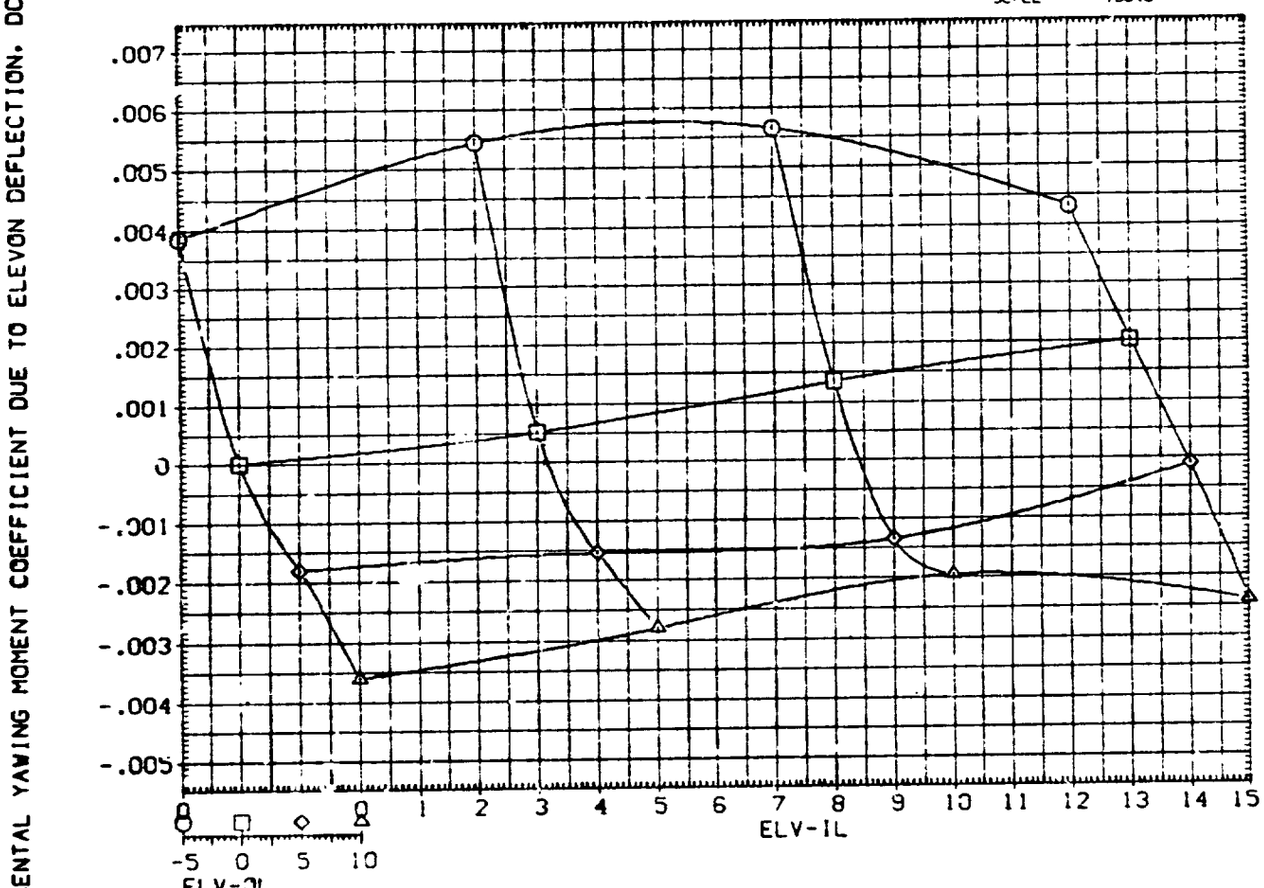
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 0.0 (B1NFSF)

PARAMETRIC VALUES

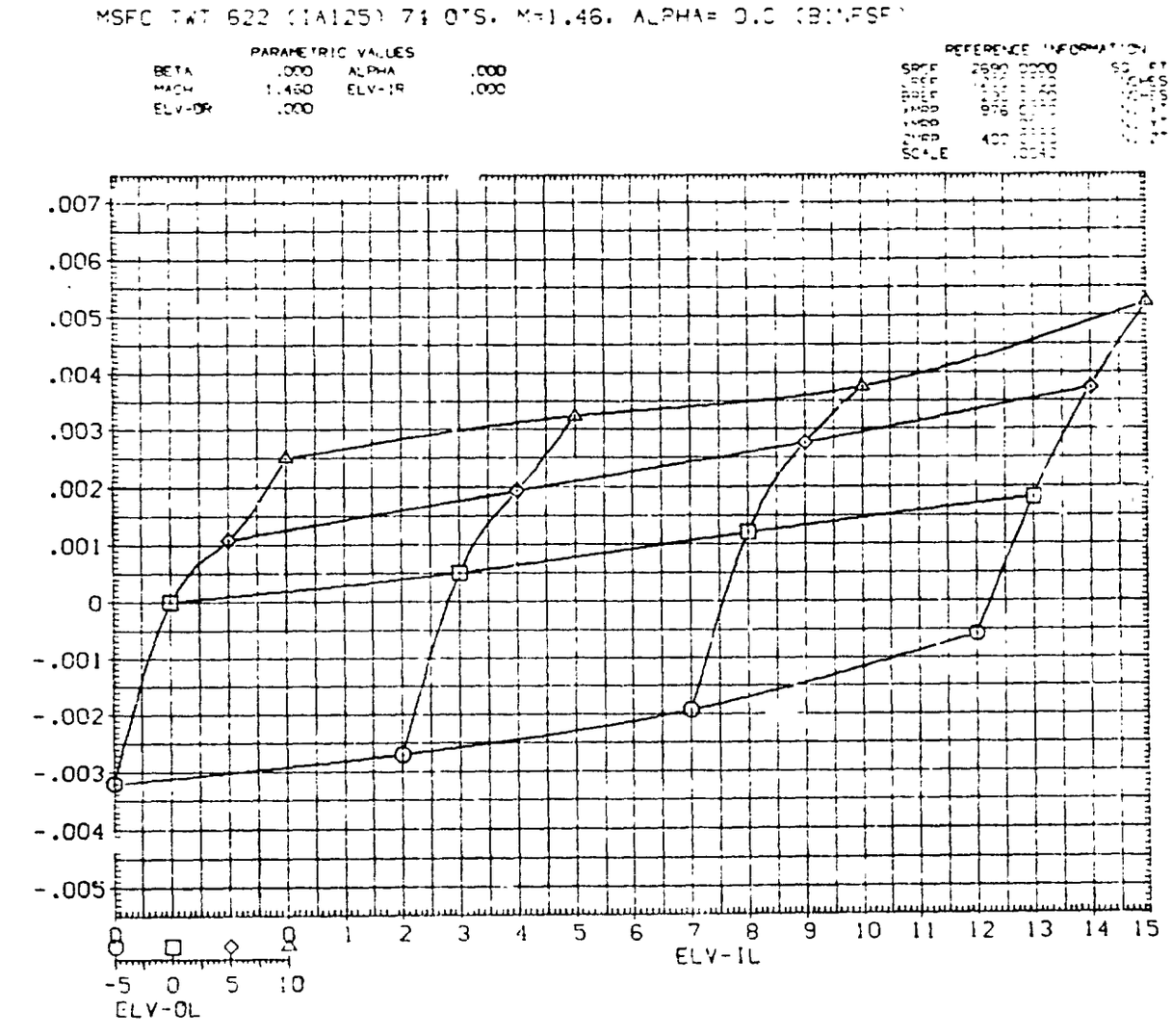
BETA	.000	ALPHA	.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46



ELEVON EFFECTIVENESS FOR MACH = 1.46

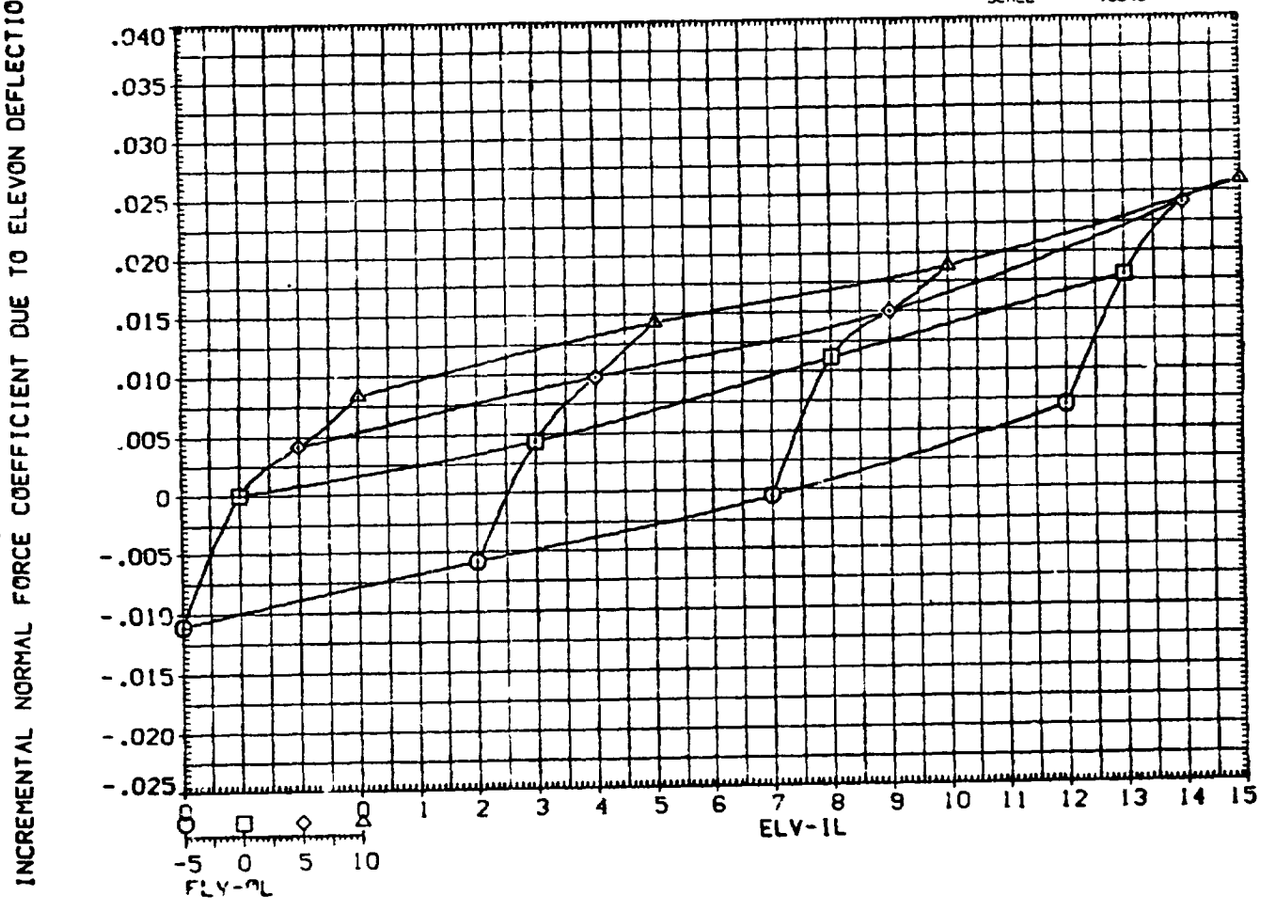
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 2.0 (BINFSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

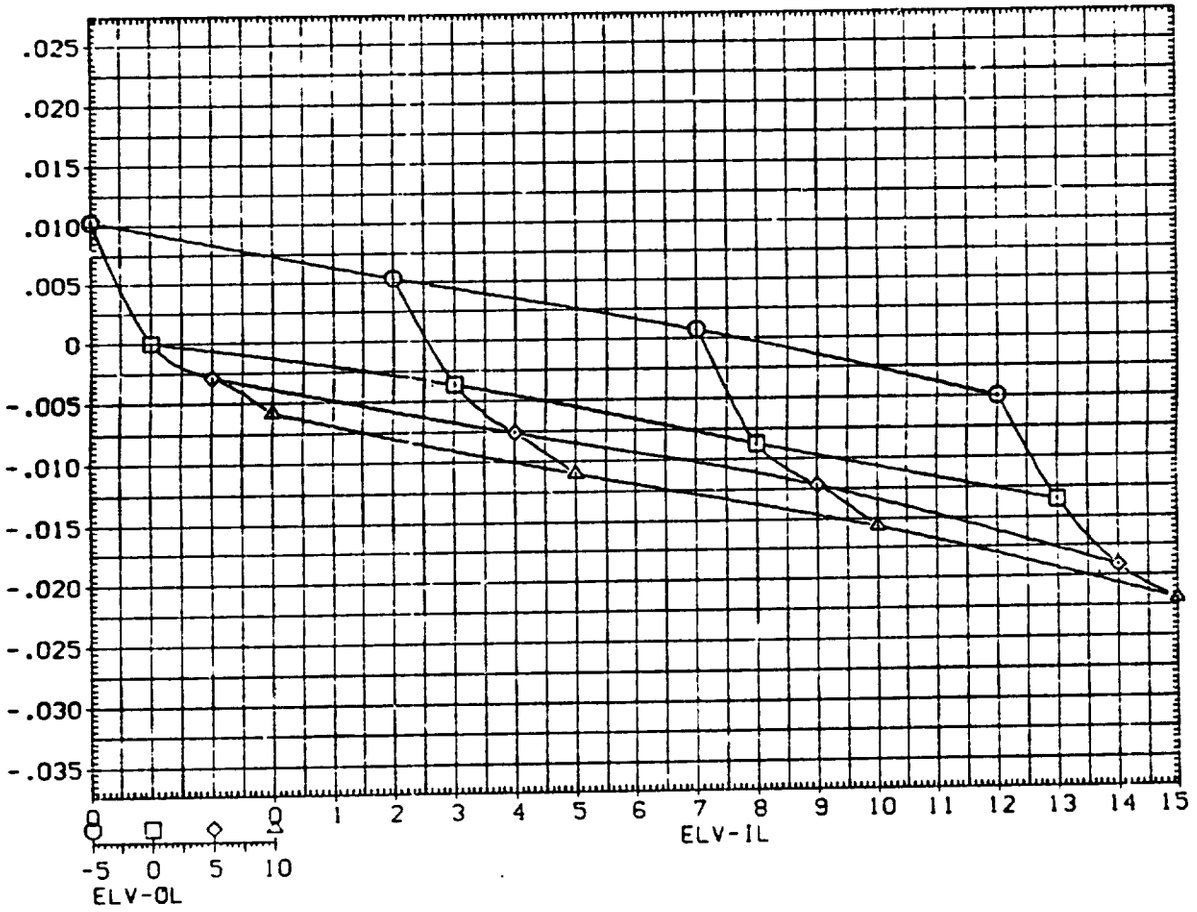
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 2.0 (B1NFSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.460	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	[illegible]	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	[illegible]	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

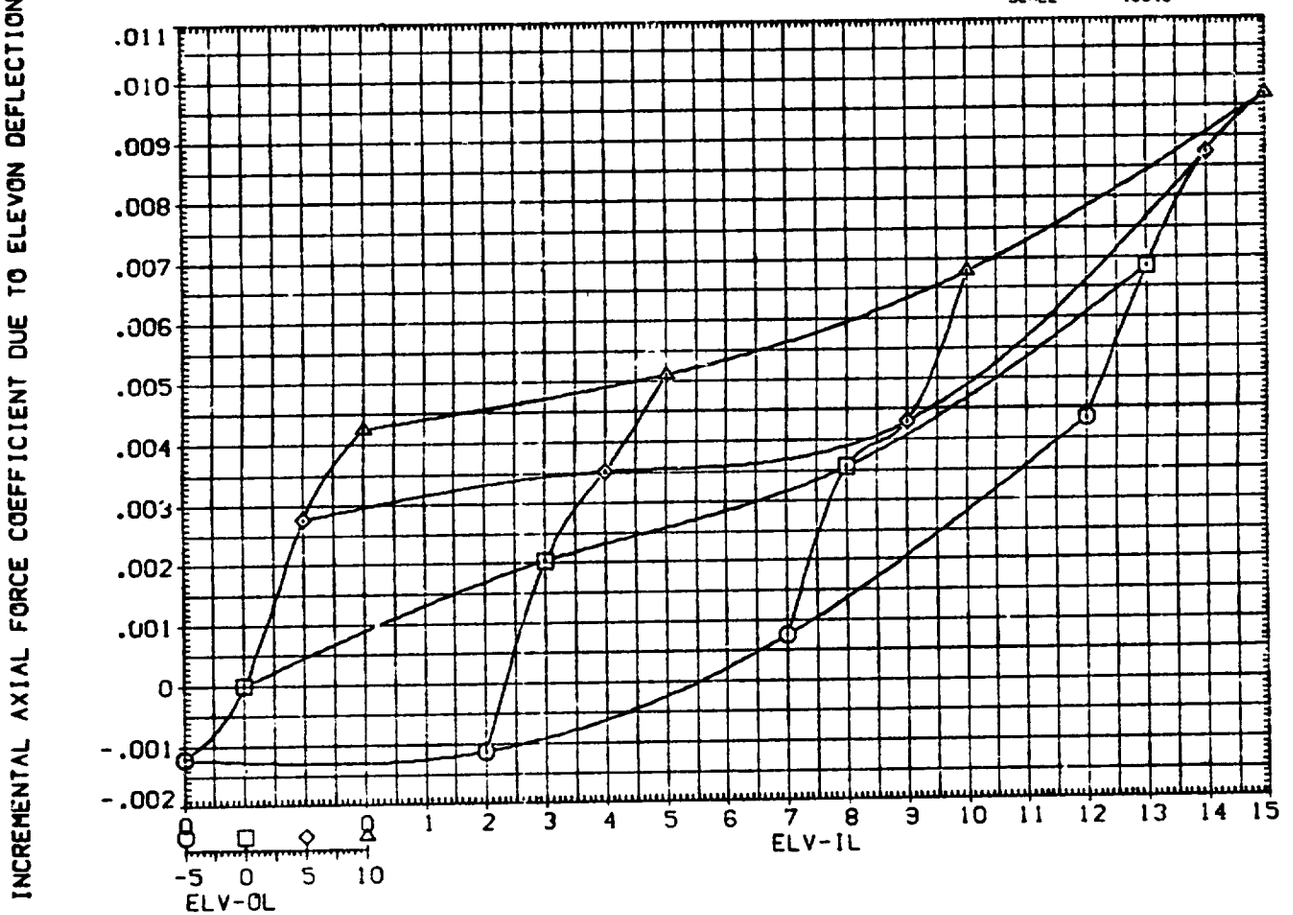
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 2.0 (BINFSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

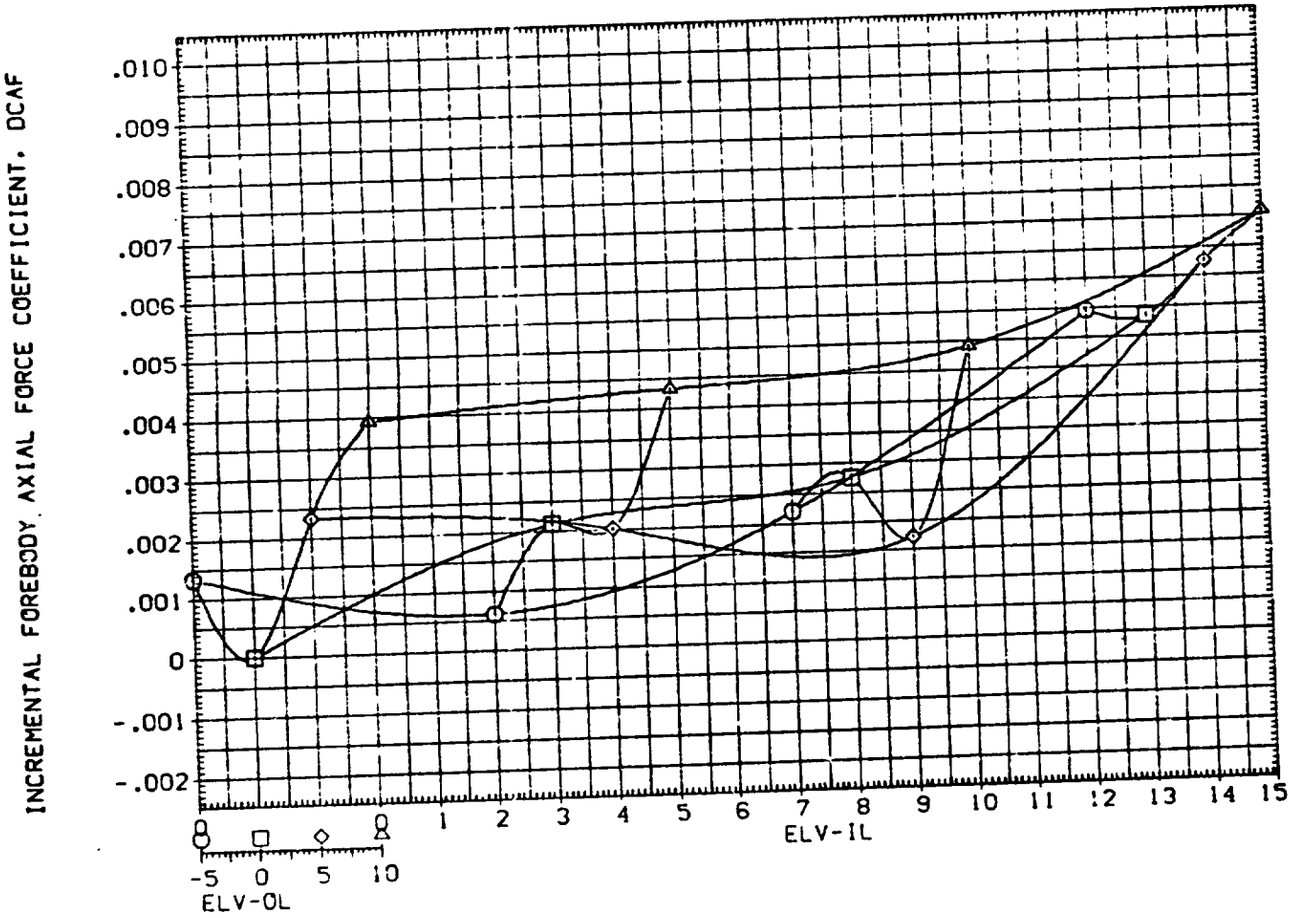
MSFC TWT 622 (1A125) 74 OTS. M=1.46, ALPHA= 2.0 (BINFSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

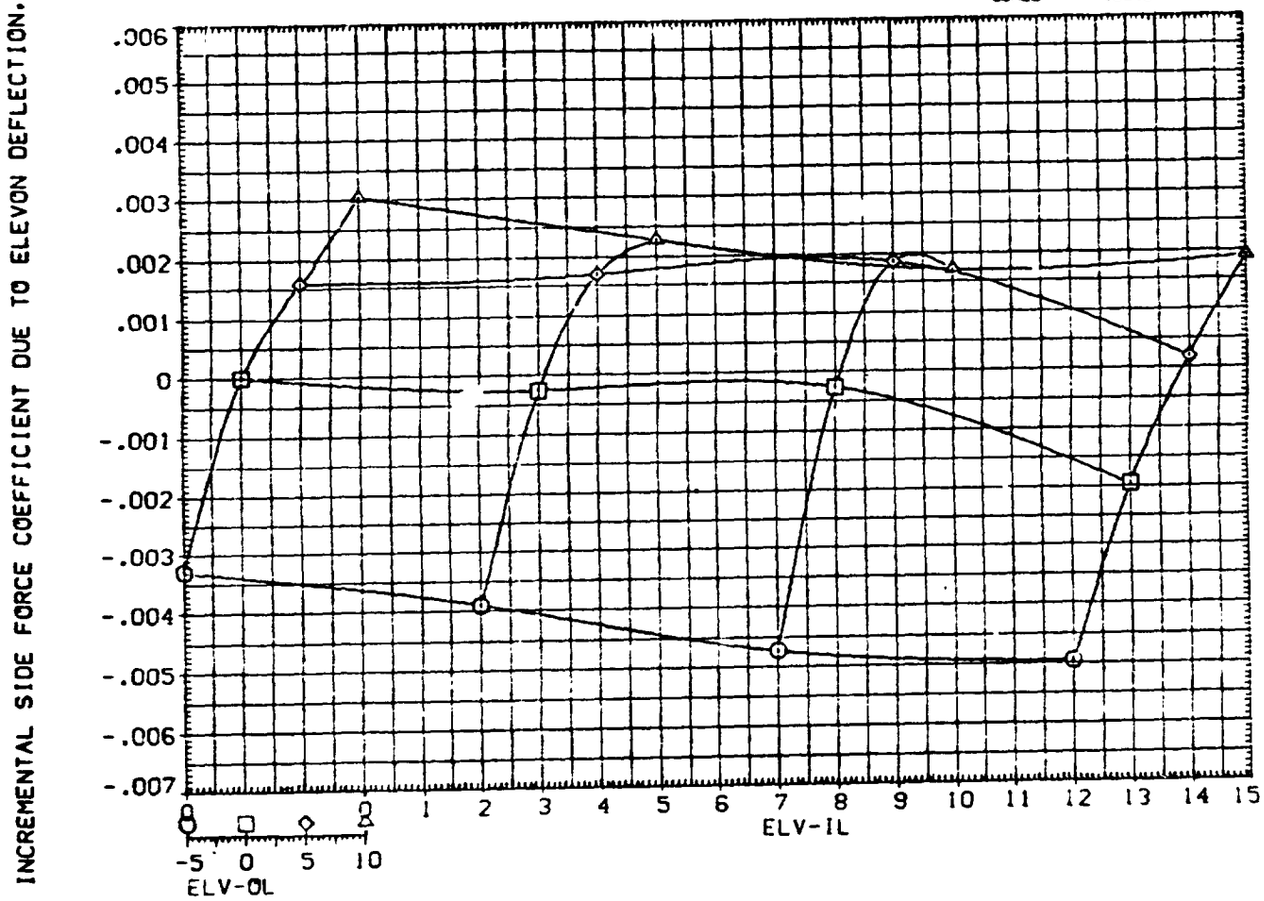
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 2.0 (B1NFSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

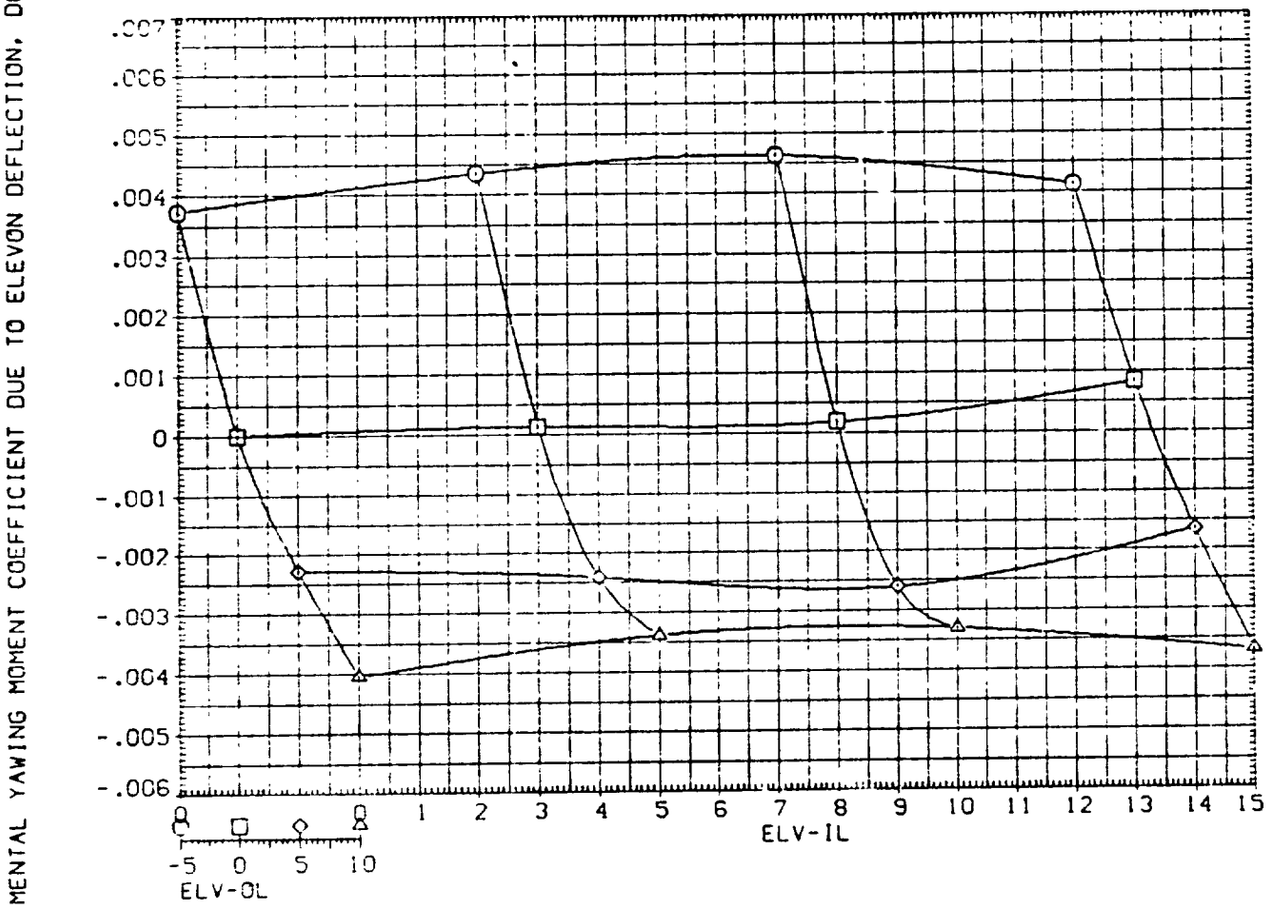
MSFC TWT 622 (A125) 74 OTS. M=1.46. ALPHA= 2.0 (BINFSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1280.0000	[illegible]
BREF	1280.0000	[illegible]
XMRP	976.0000	[illegible]
YMRP	.0000	[illegible]
ZMRP	400.0000	[illegible]
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

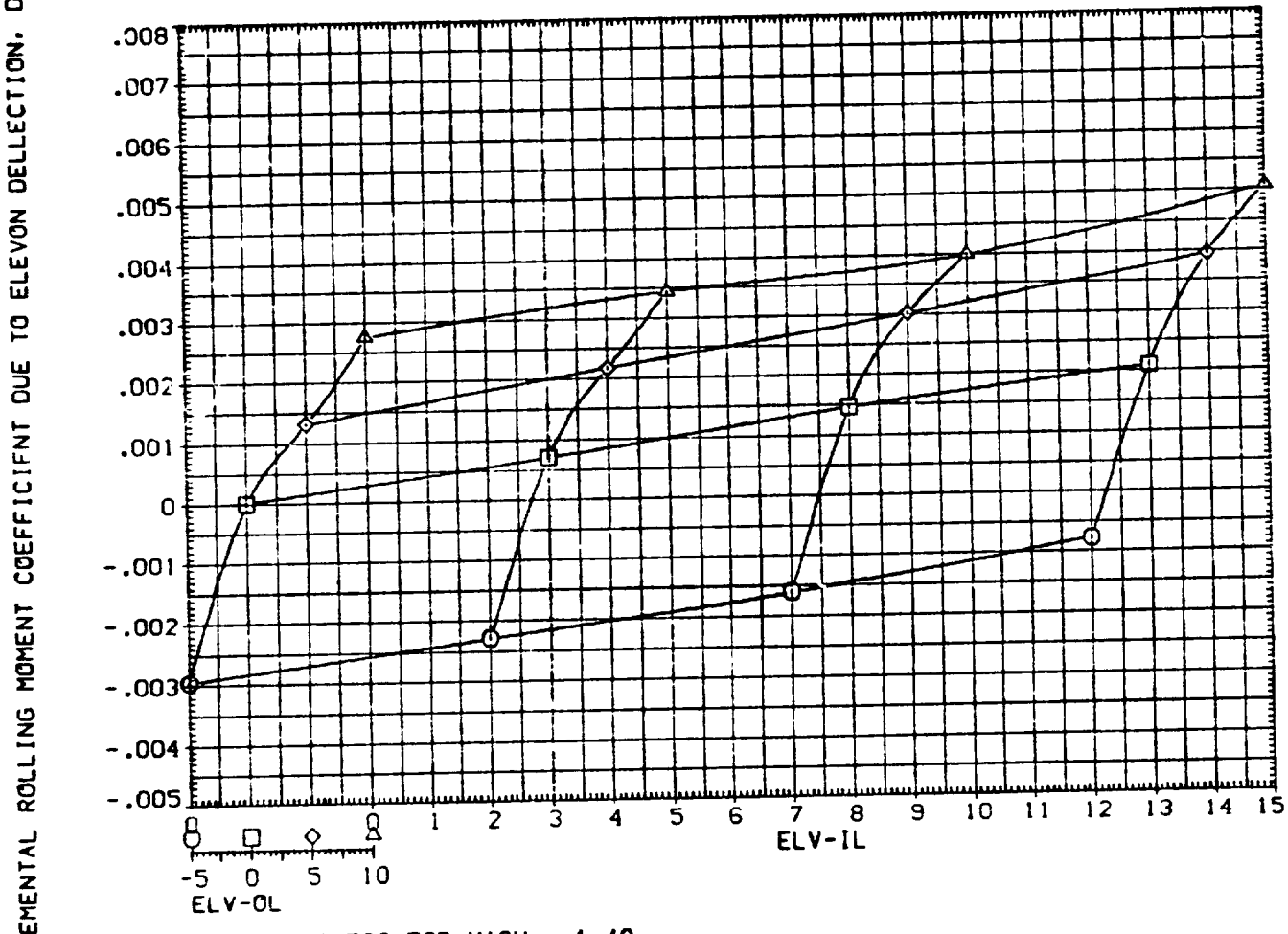
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 2.0 (BINFSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

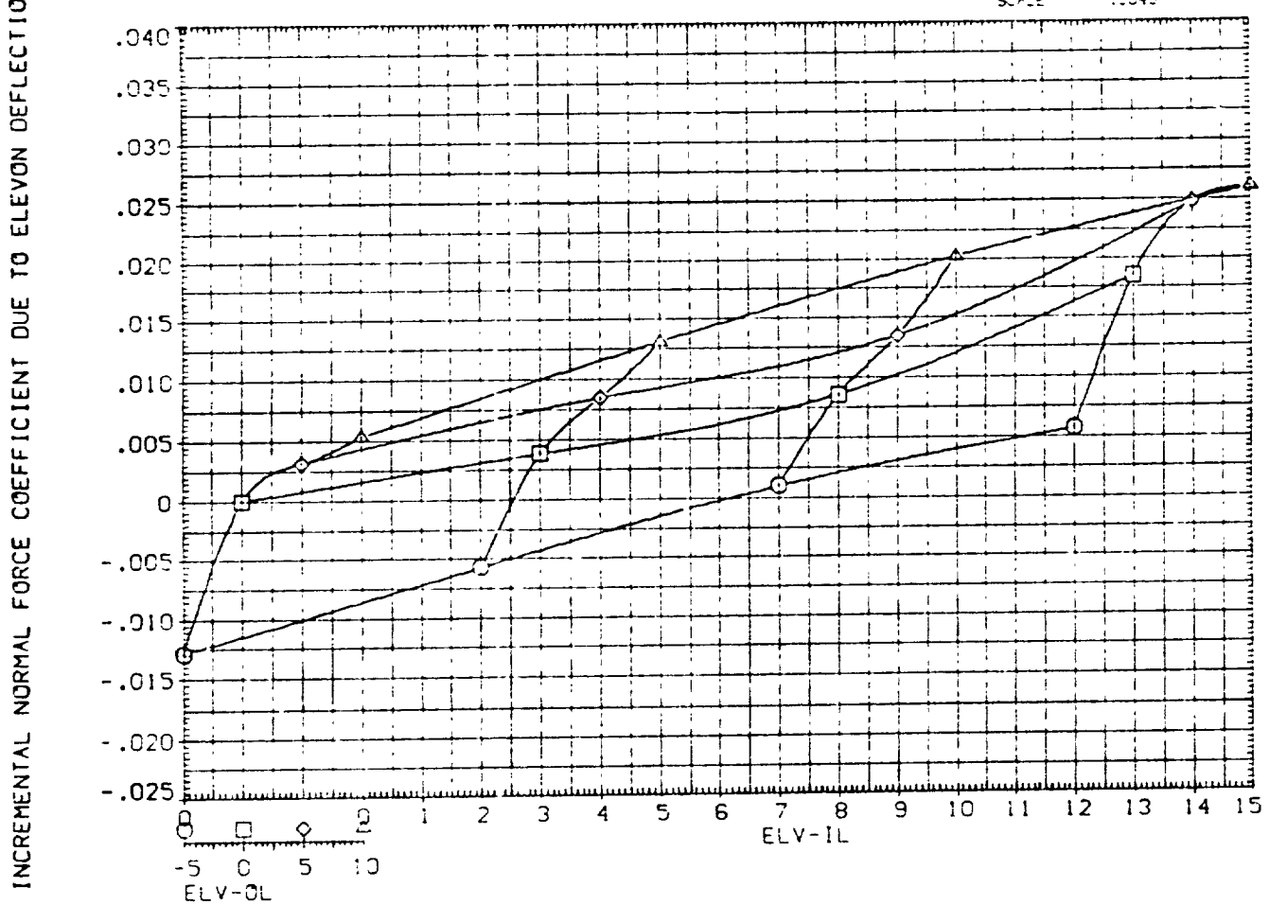
MSFC TWT 622 (IA125) 74 OTS. M=1.46, ALPHA= 4.0 (BINFSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2500.0000	[illegible]	[illegible]
LREF	[illegible]	[illegible]	[illegible]
BREF	[illegible]	[illegible]	[illegible]
XMRP	975.0000	[illegible]	[illegible]
YMRP	[illegible]	[illegible]	[illegible]
ZMRP	400.0000	[illegible]	[illegible]
SCALE	.0040		



ELEVON EFFECTIVENESS FOR MACH = 1.46

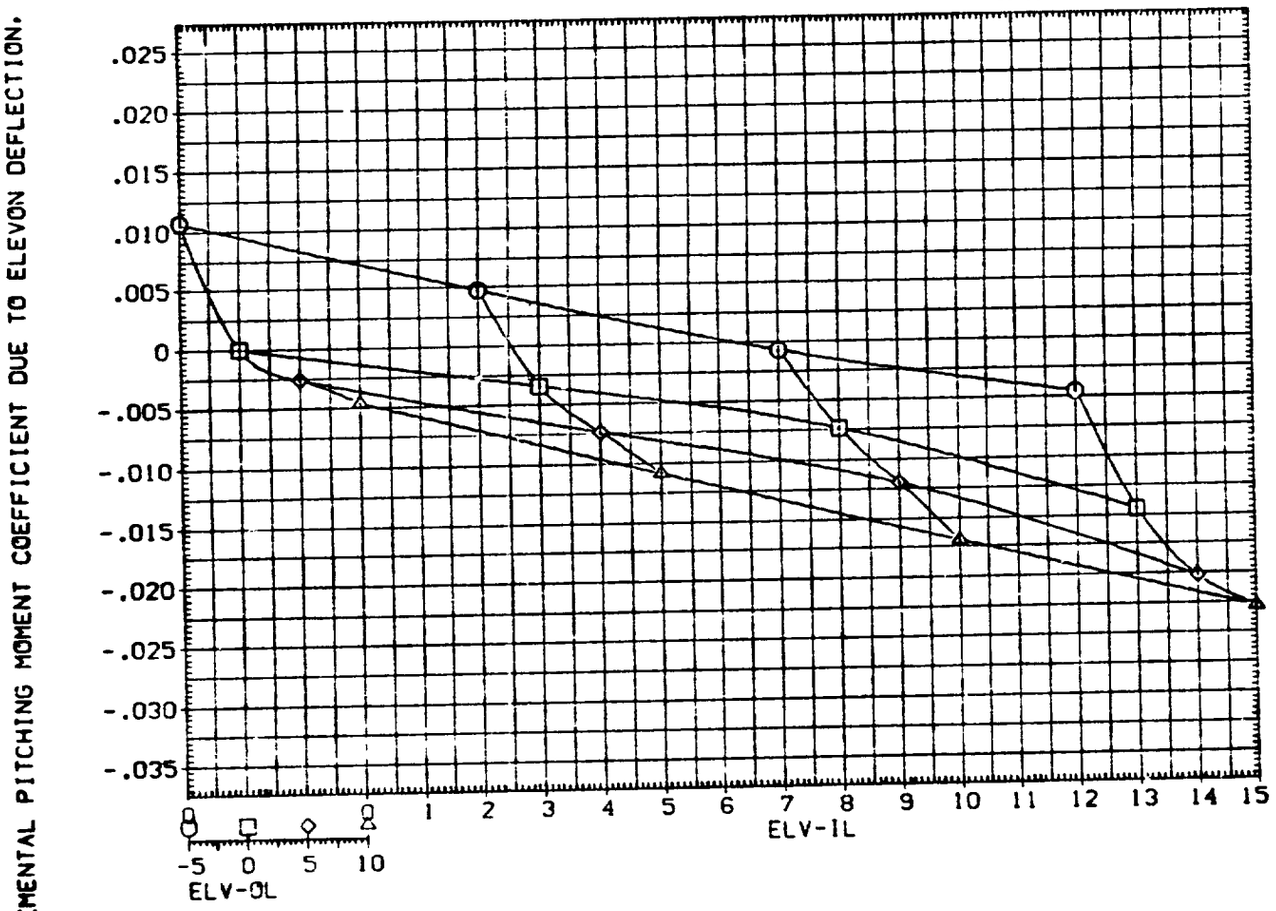
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 4.0 (B1NFSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

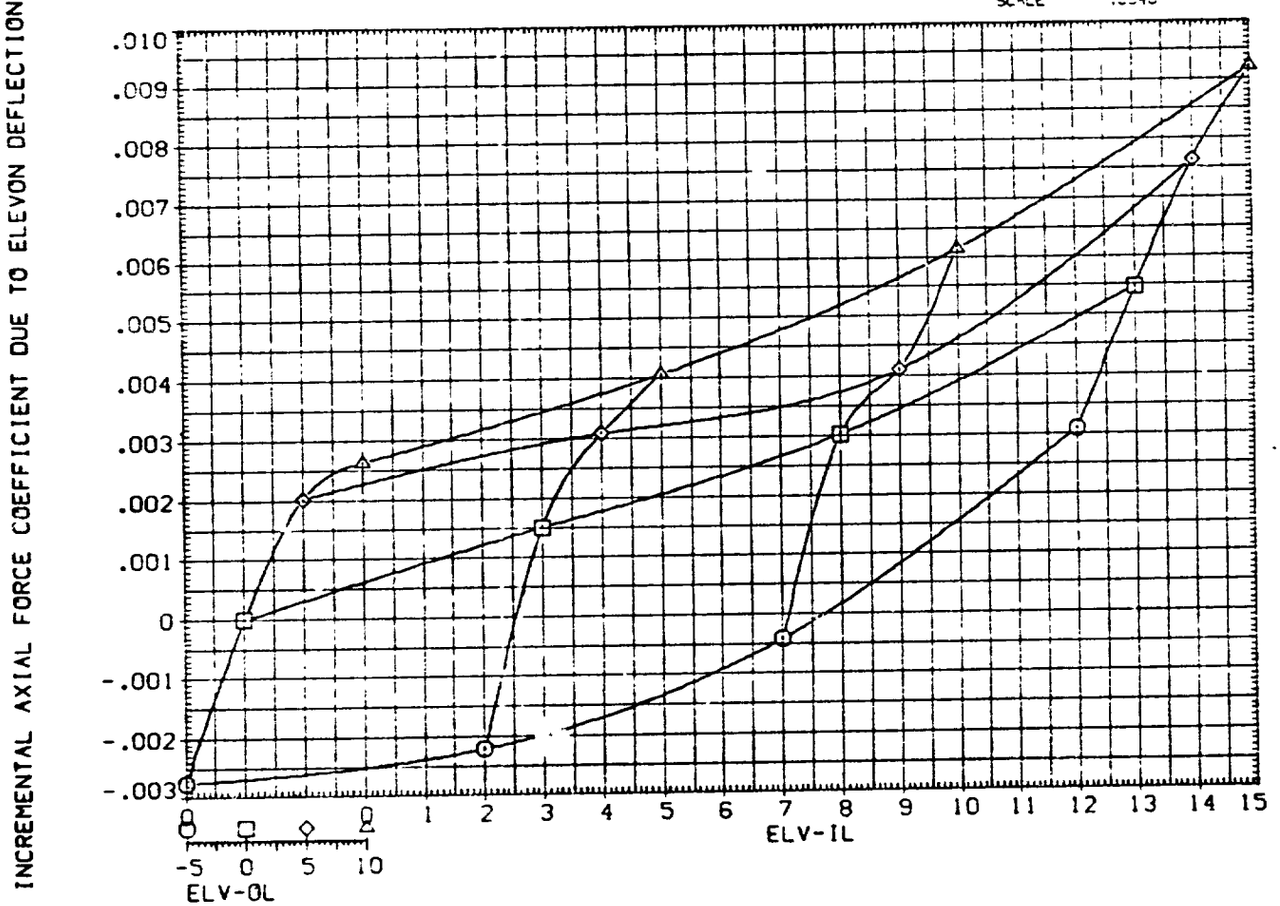
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 4.0 (BINFSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2600.0000	SQ. FT
CREF	1260.0000	INCHES
BREF	1260.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

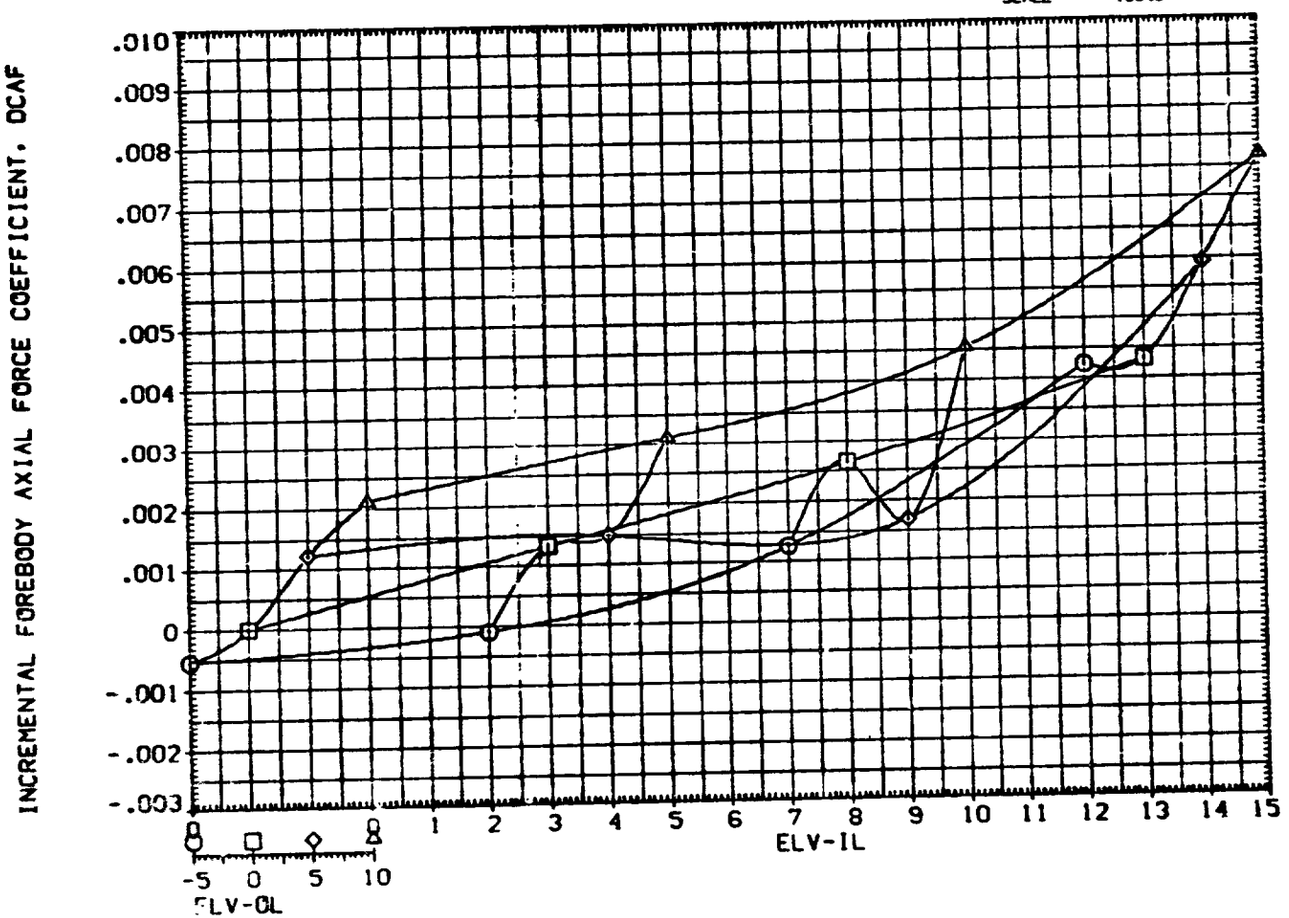
HSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 4.0 (BINFSH)

PARAMETRIC VALUES

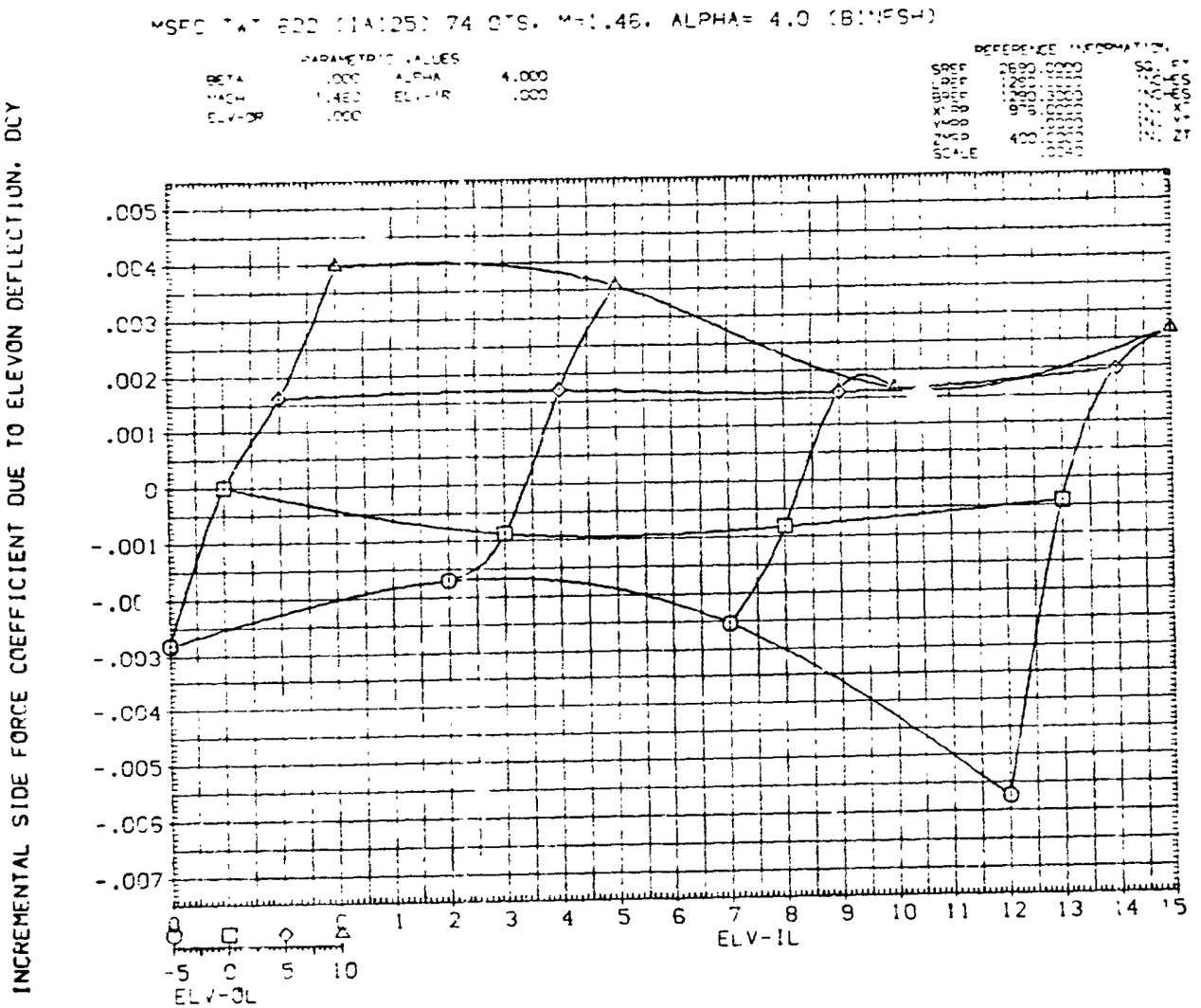
BETA	.000	ALPHA	4.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46



ELEVON EFFECTIVENESS FOR MACH = 1.46

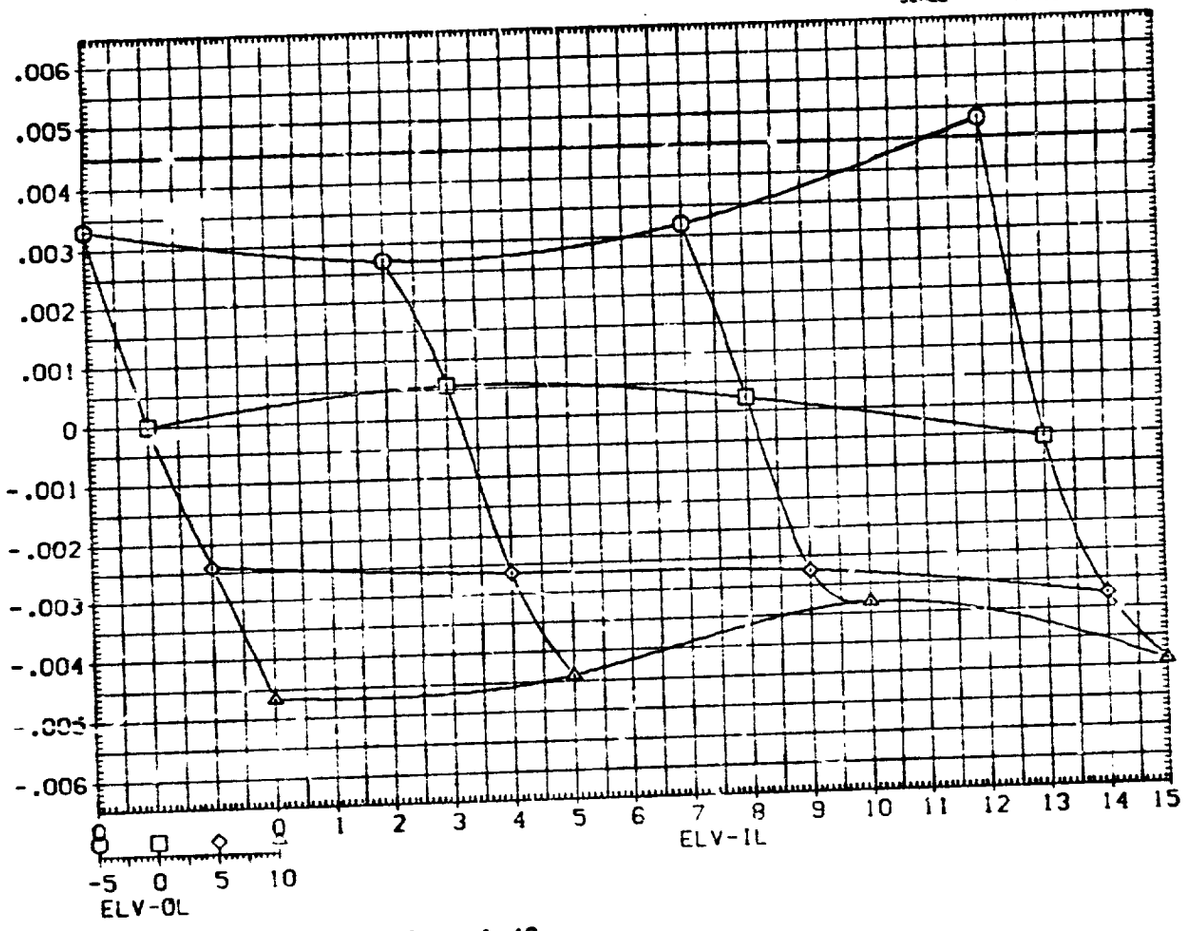
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 4.0 (BINFSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

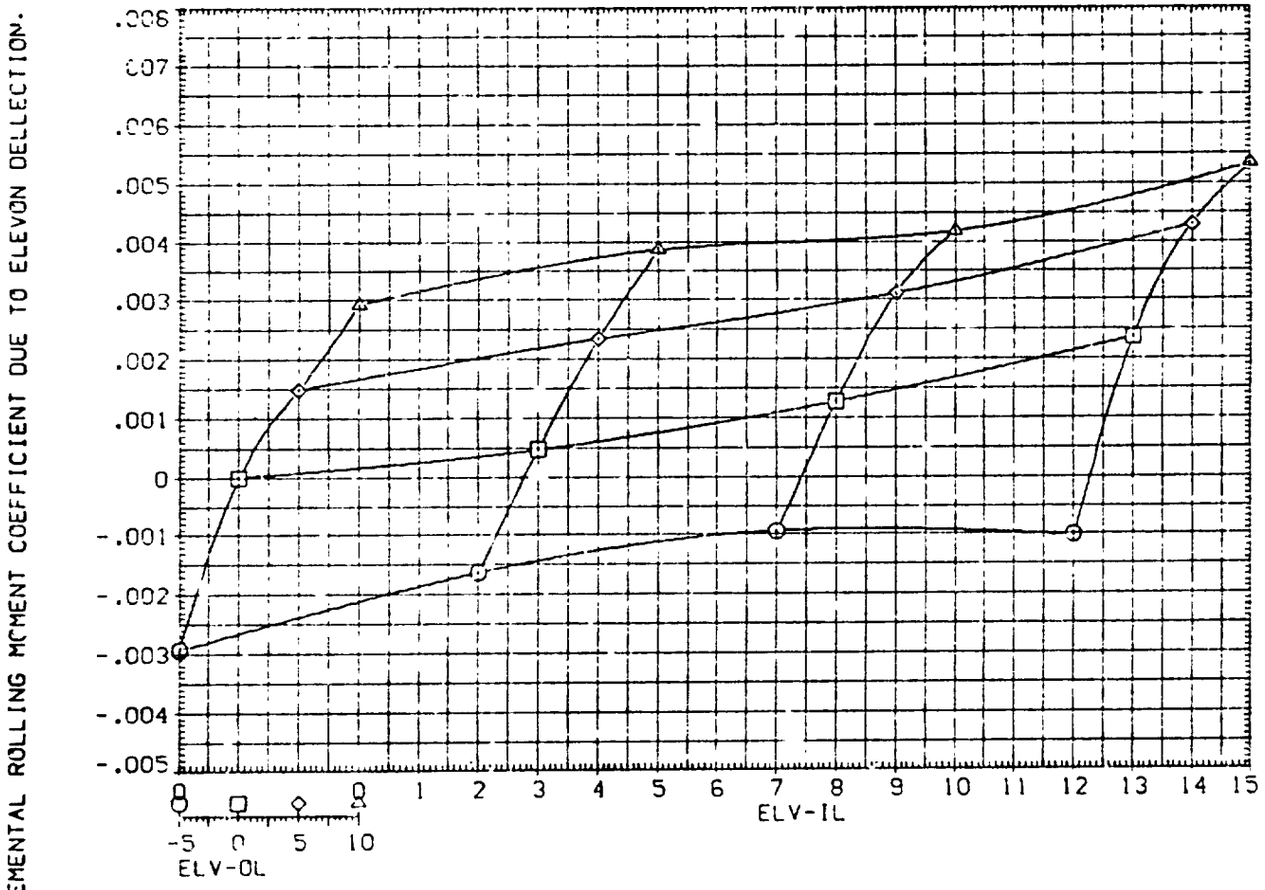
MSFC TWT 622 (IA125) 74 CTS. M=1.46, ALPHA= 4.0 (BINFSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
CREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

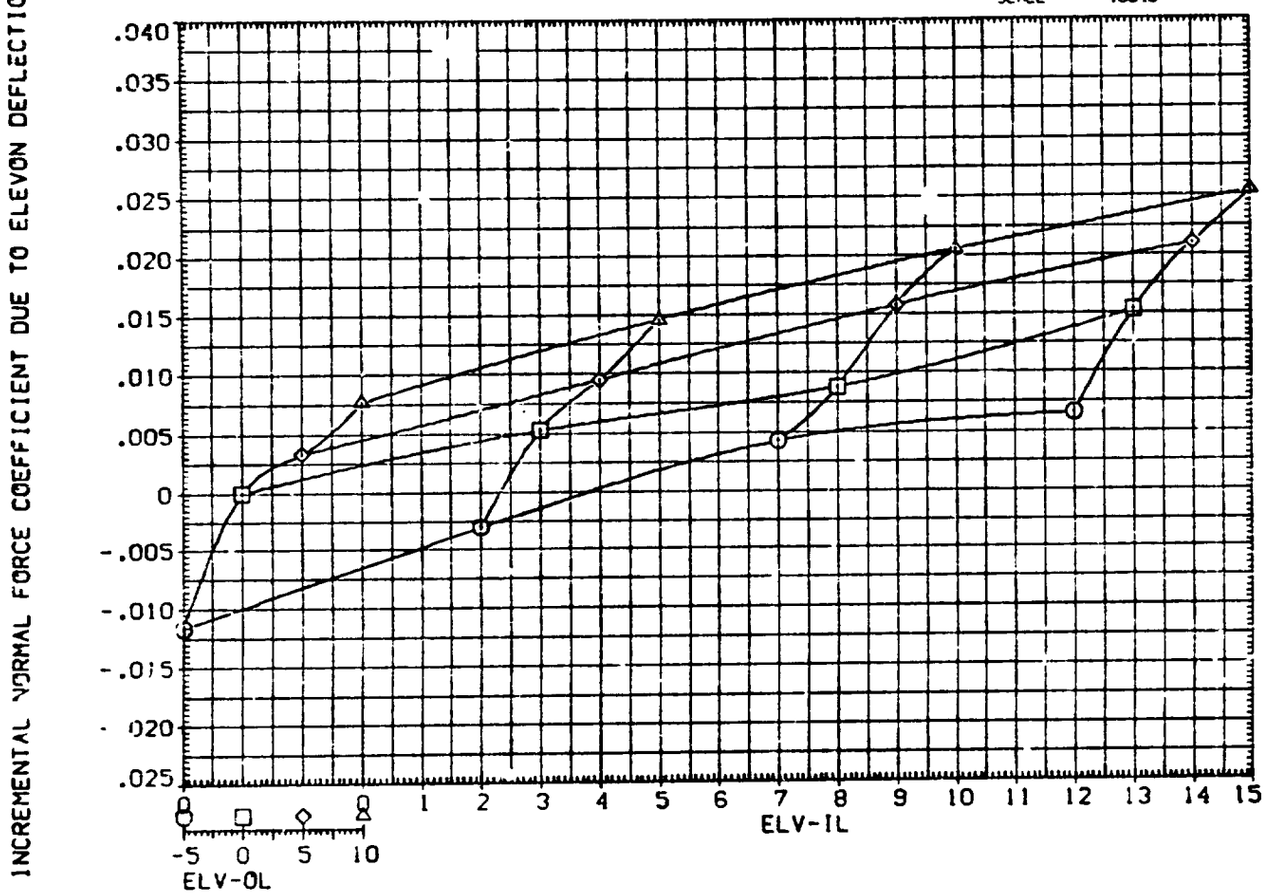
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 6.0 (BINFSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

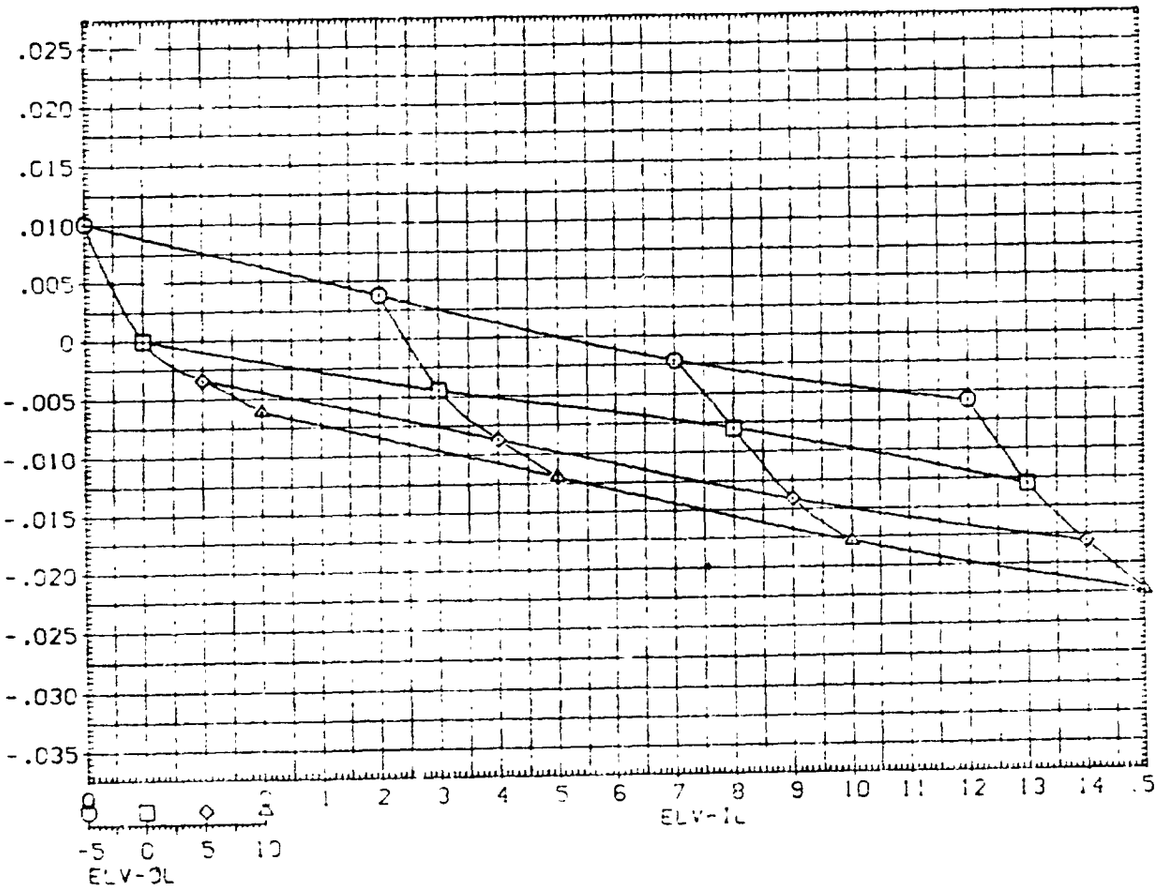
MSFC TWT 622 (IA125) 74 OTS. M=1.46, ALPHA= 6.0 (BINFSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2600.0000	SQ. FT
CREF	280.0000	INCHES
BREF	480.0000	INCHES
XMRP	378.0000	IN. FS
YMRP	0.0000	IN. FS
ZMRP	400.0000	IN. FS
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

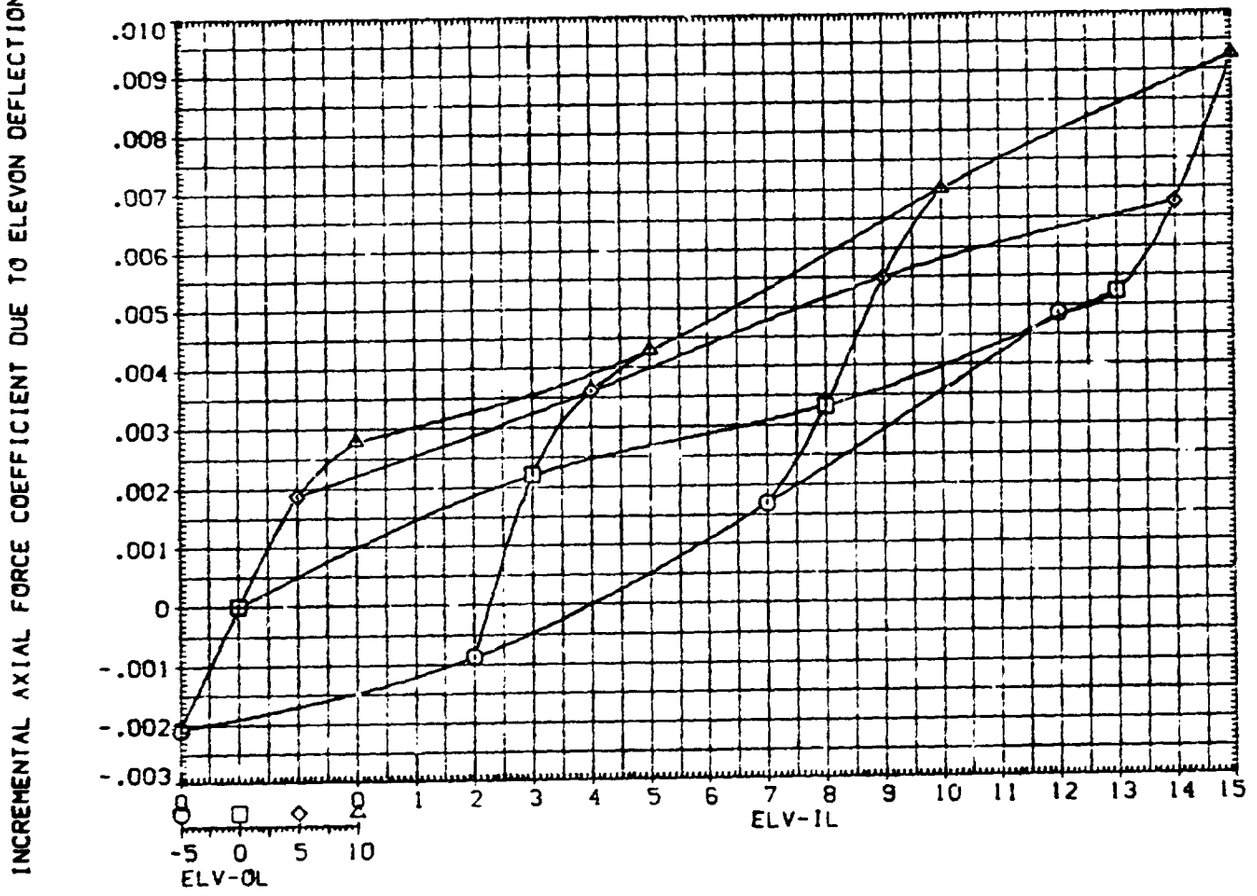
MSFC TWT 622 (IA125) 74 OTS. M=1.46, ALPHA= 6.0 (BINFSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

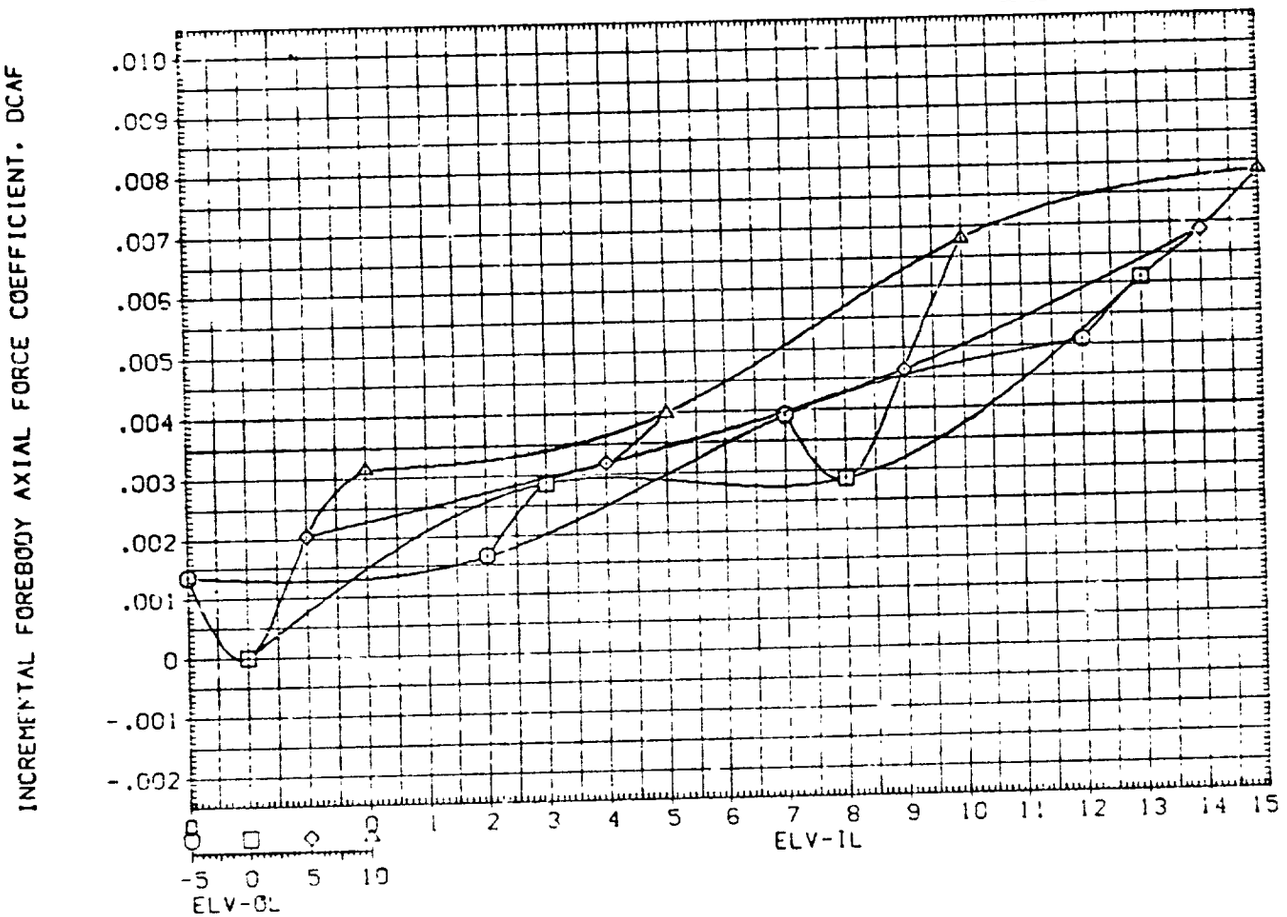
MSFC TWT 622 (:A125) 74 CTS. M=1.46. ALPHA= 6.0 (BINFSI)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.460	ELV-1R	.000
ELV-0R	.000		

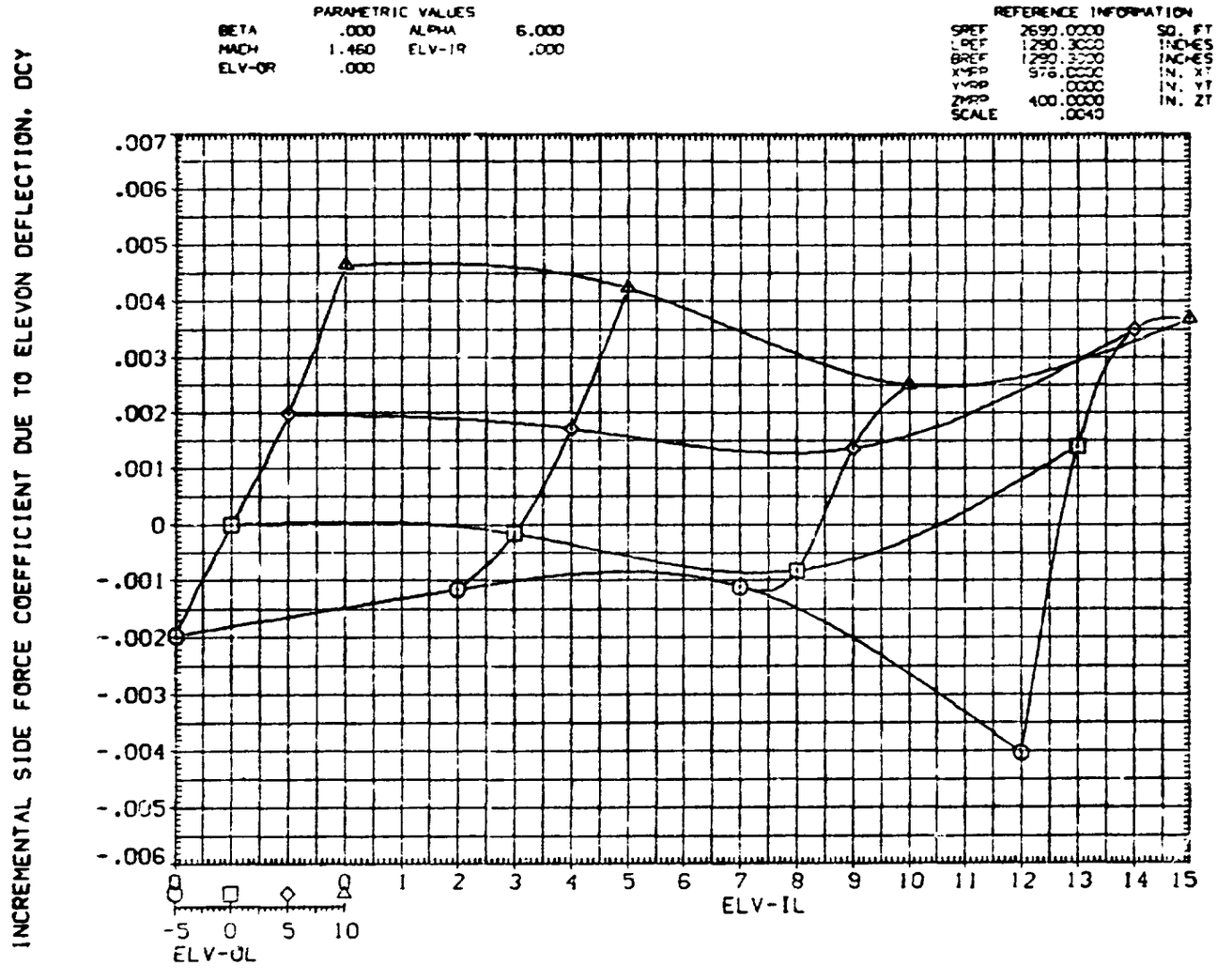
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 6.0 (BINFSI)



ELEVON EFFECTIVENESS FOR MACH = 1.46

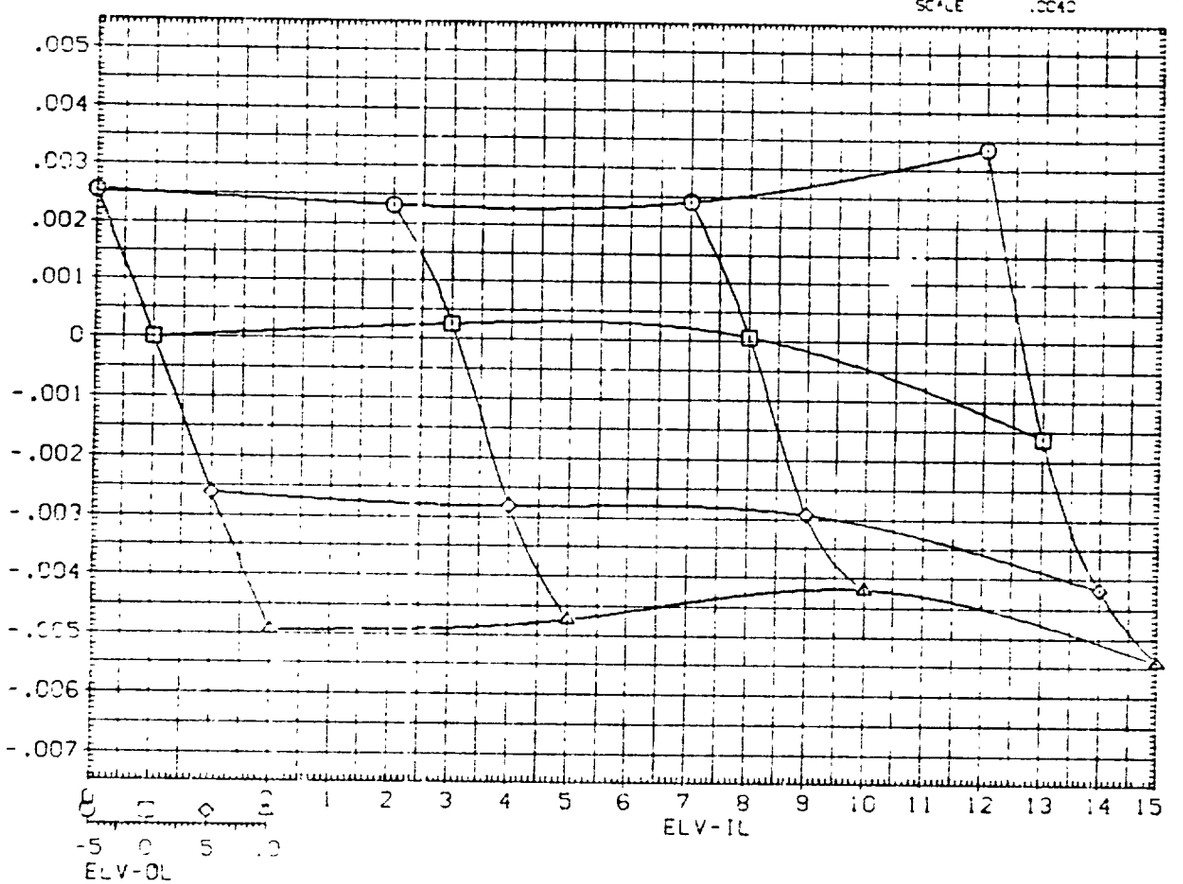
MSFC TWT 622 (IA125) 74 OTS. M=1.46, ALPHA= 6.0 (BINFS!)

PARAMETRIC VALUES

BETA	.000	ALPHA	6.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	XT
YMRP	.0000	YT
ZMRP	400.0000	ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

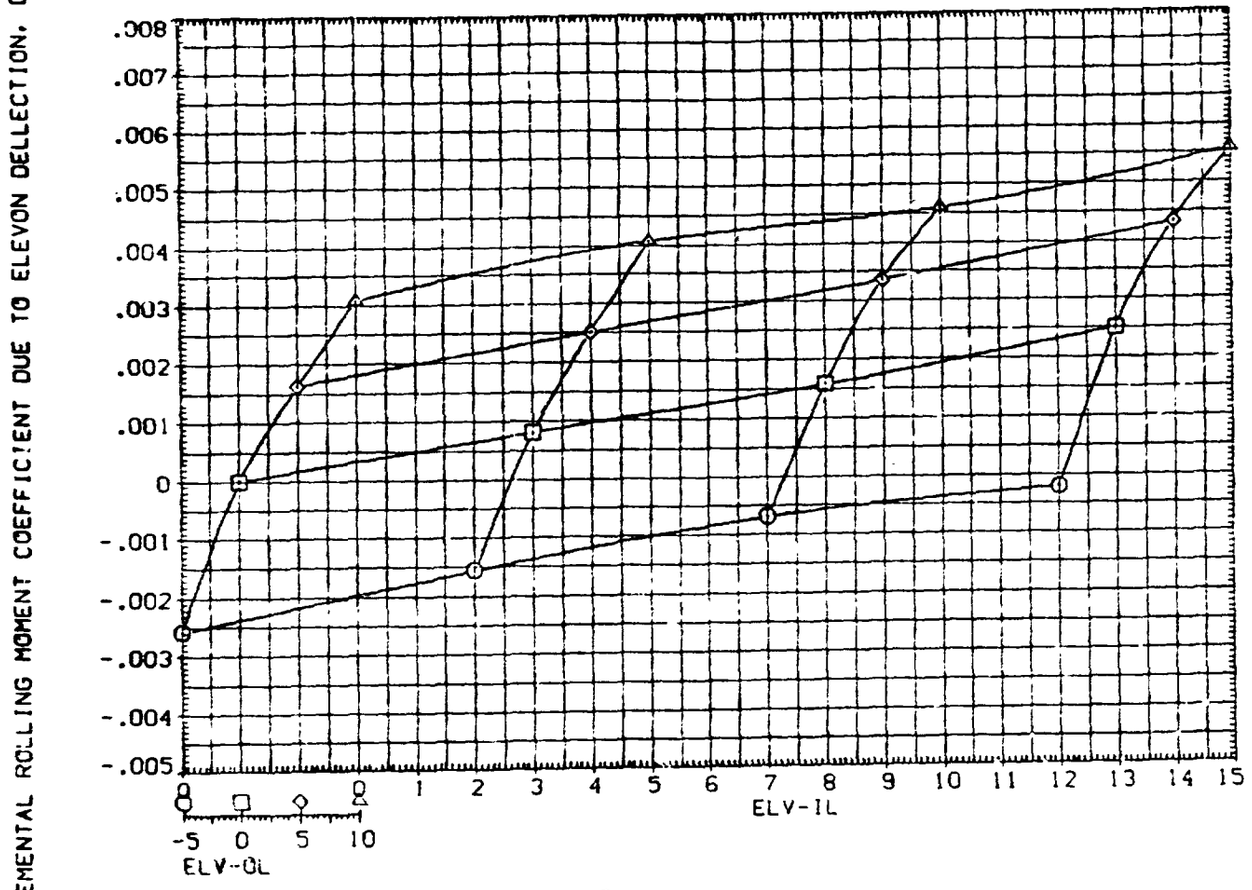
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 6.0 (BINFSI)

PARAMETRIC VALUES

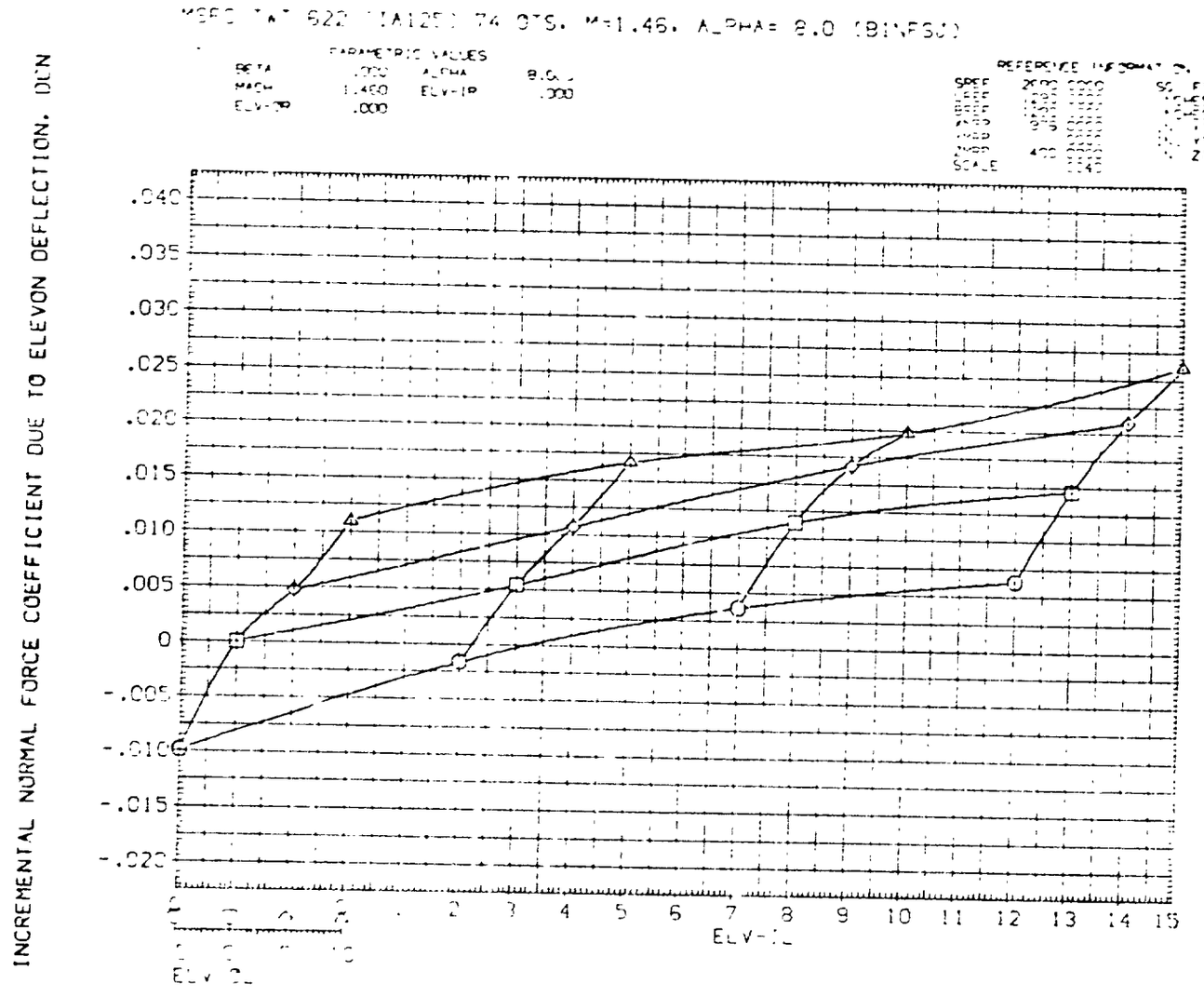
BETA	.000	ALPHA	6.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46



ELEVON EFFECTIVENESS FOR MACH = 1.46

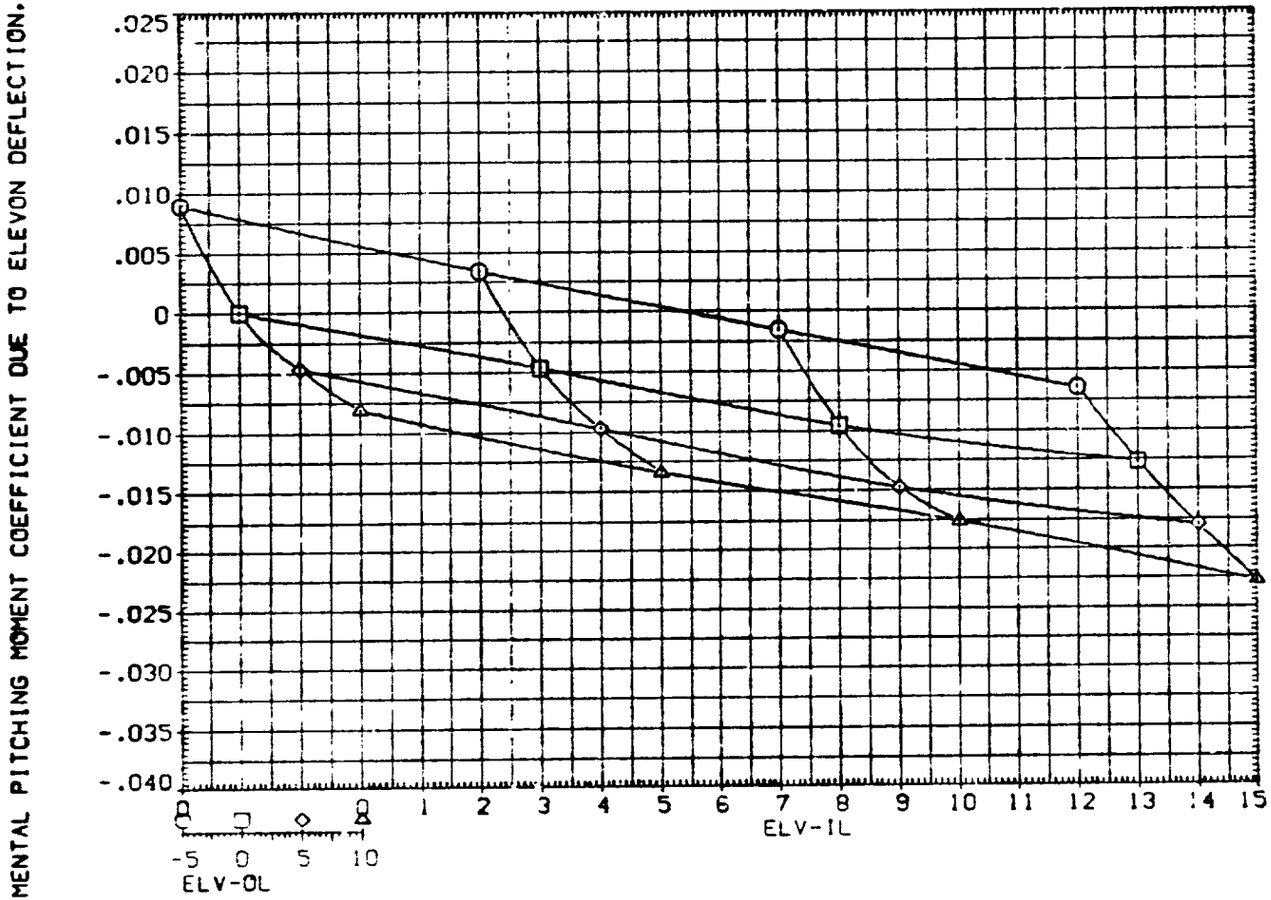
MSFC TWT 622 (IA125) 74 PTS. M=1.46, ALPHA= 8.0 (BINFSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

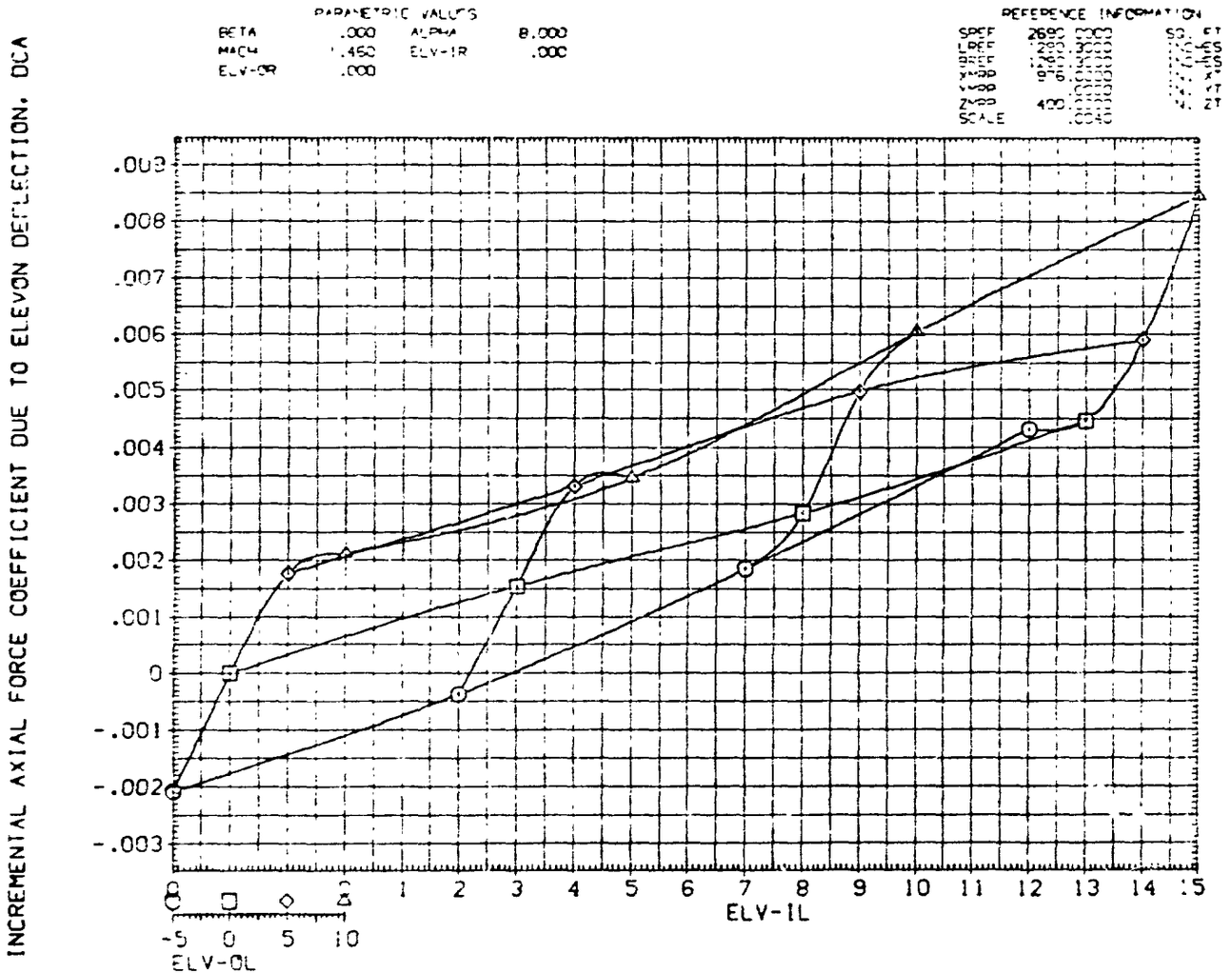
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 8.0 (BINFSJ)



ELEVON EFFECTIVENESS FOR MACH = 1.46

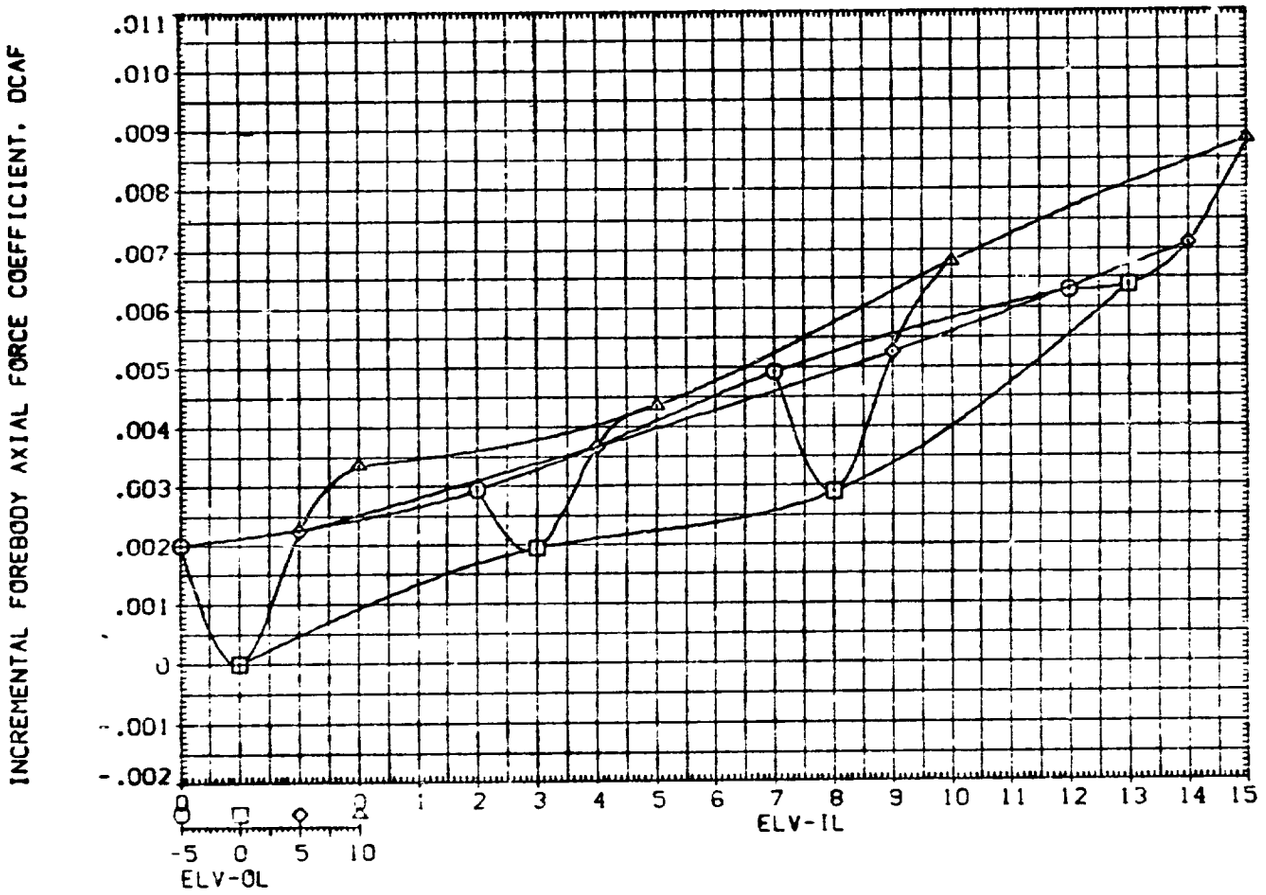
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 8.0 (BINFSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

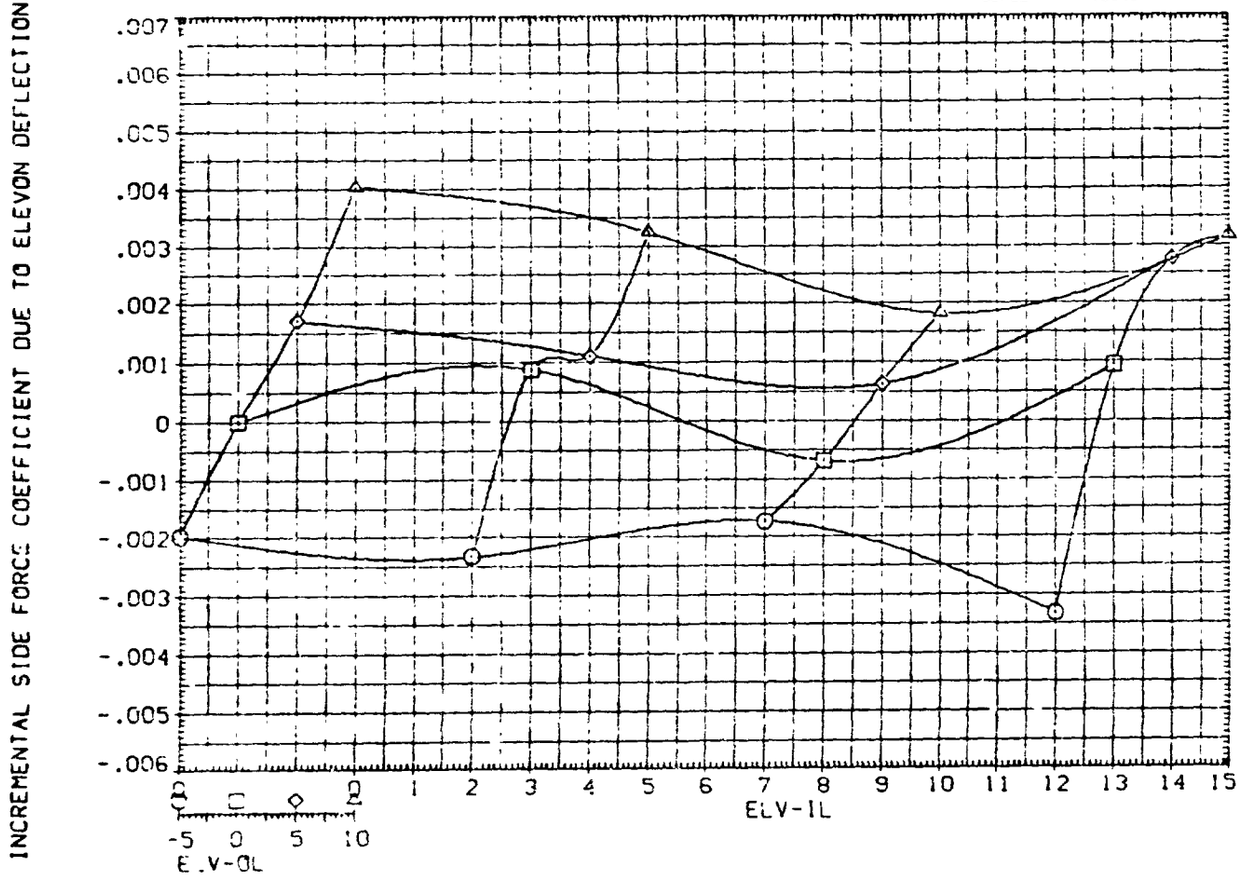
MSFC TWT 622 (1A125) 74 OTS. M=1.46. ALPHA= 8.0 (BINFSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1220.0000	INCHES
BREF	1220.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

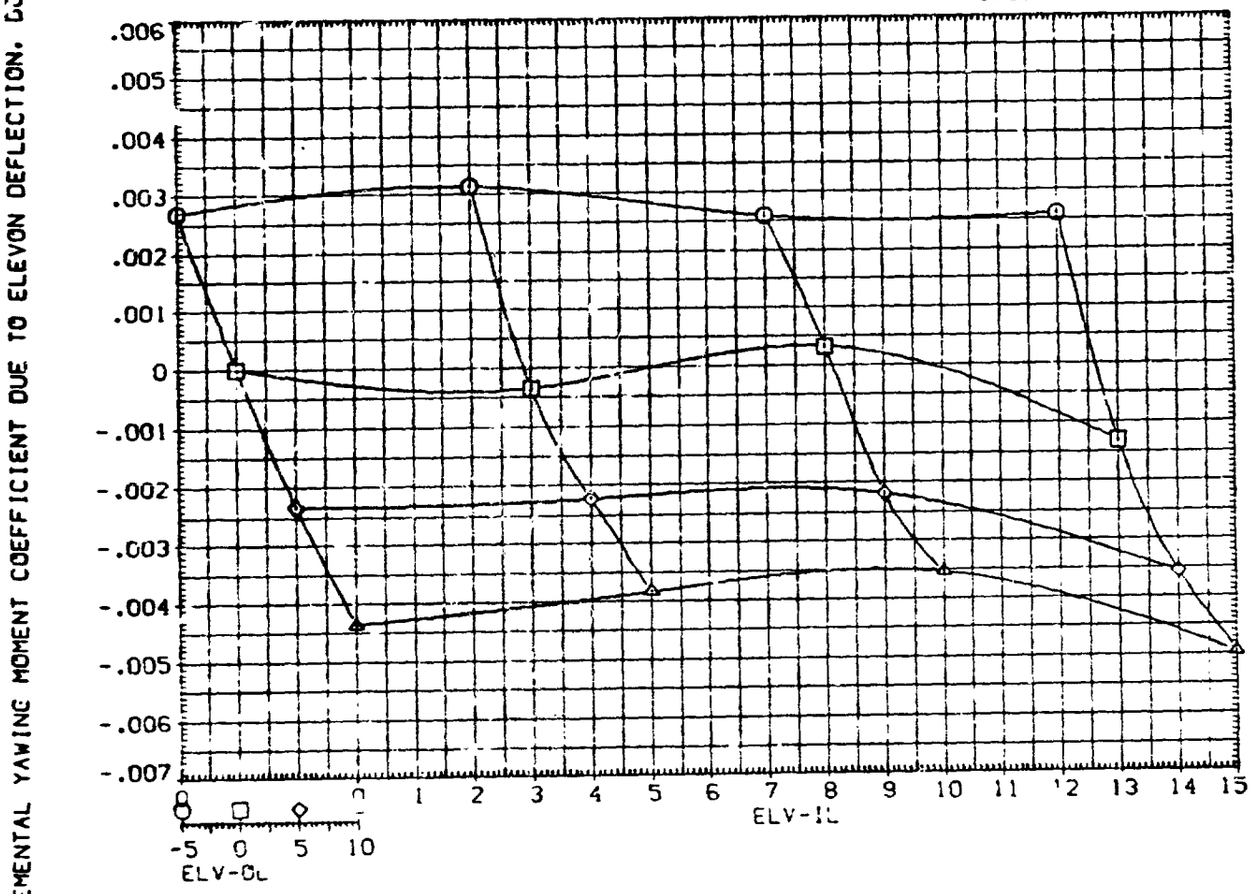
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 8.0 (BINFSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

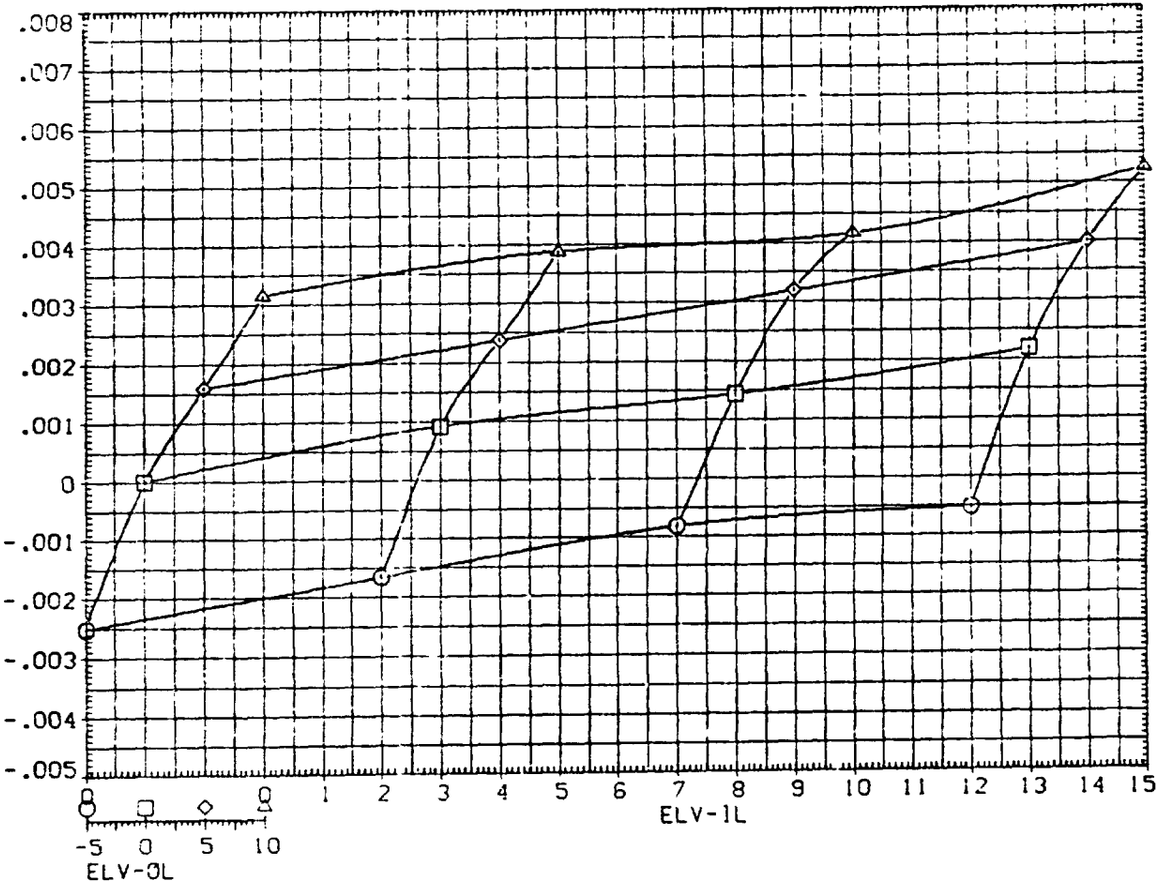
MSFC TWT 622 (IA125) 74 OTS. M=1.46, ALPHA= 8.0 (BINFSJ)

PARAMETRIC VALUES

BETA	.000	ALPHA	8.000
MACH	1.460	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1293.3000	INCHES
BREF	1293.3000	INCHES
XMRP	976.0000	IN. X
YMRP	[illegible]	IN. Y
ZMRP	400.0000	IN. ZT
SCALE	[illegible]	



ELEVON EFFECTIVENESS FOR MACH = 1.46

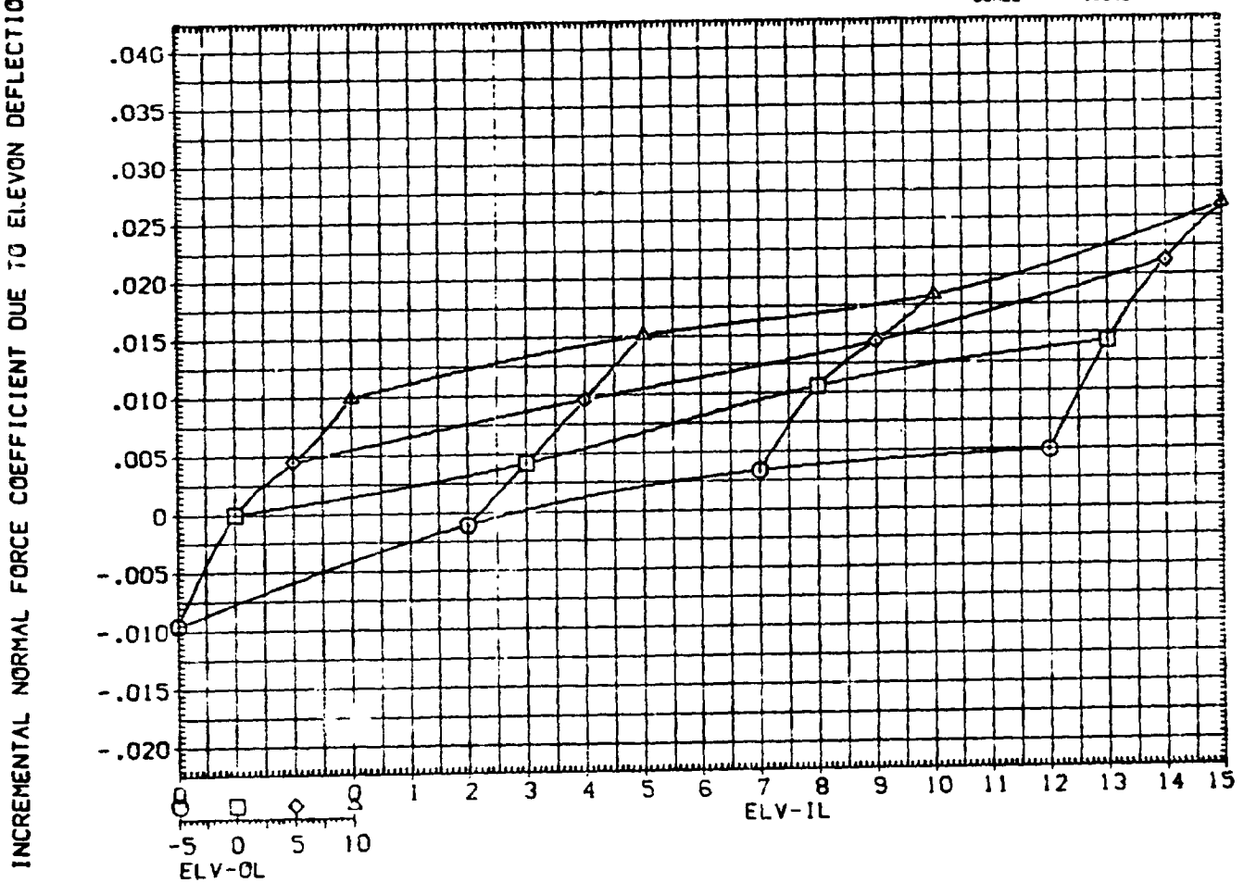
MSFC TWT 622 (IA125) 74 OTS. M=1.46, ALPHA= 10.0(BINFSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

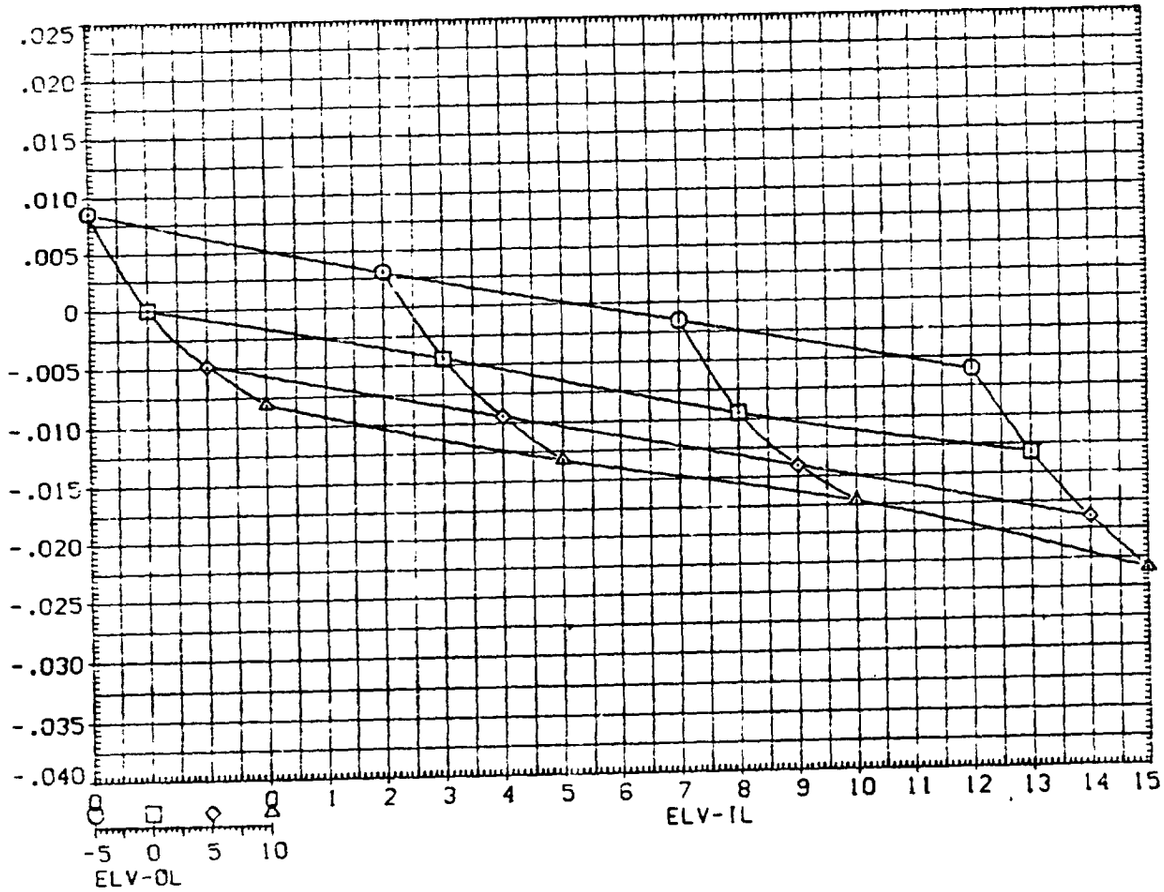
MSFC TWT 622 (IA125) 74 DTS. M=1.46. ALPHA= 10.0(BINFSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2600.0000	SQ. FT
LREF	[illegible]	INCHES
BREF	[illegible]	INCHES
XMRP	976.0000	IN. X
YMRP	.0000	IN. Y
ZMRP	400.0000	IN. Z
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

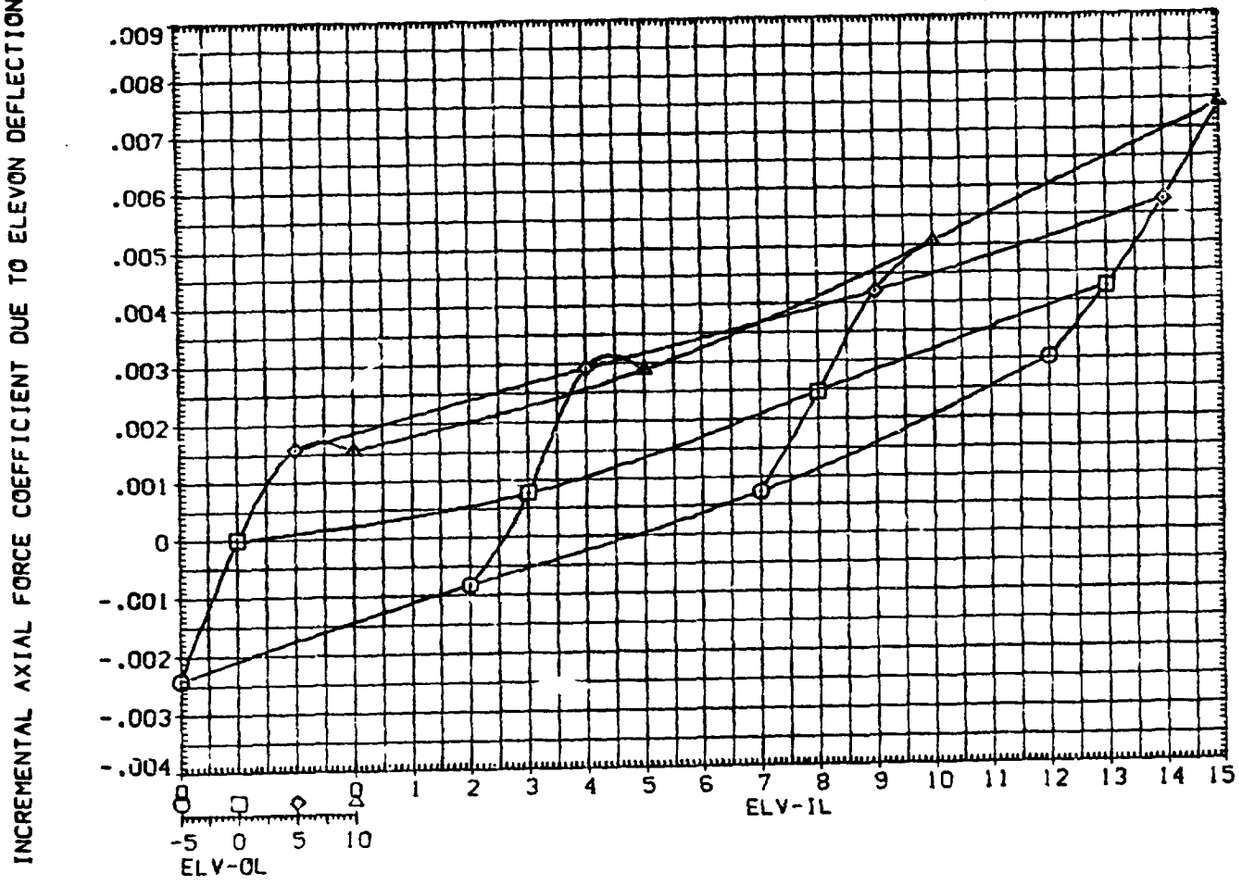
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 10.0(BINFSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

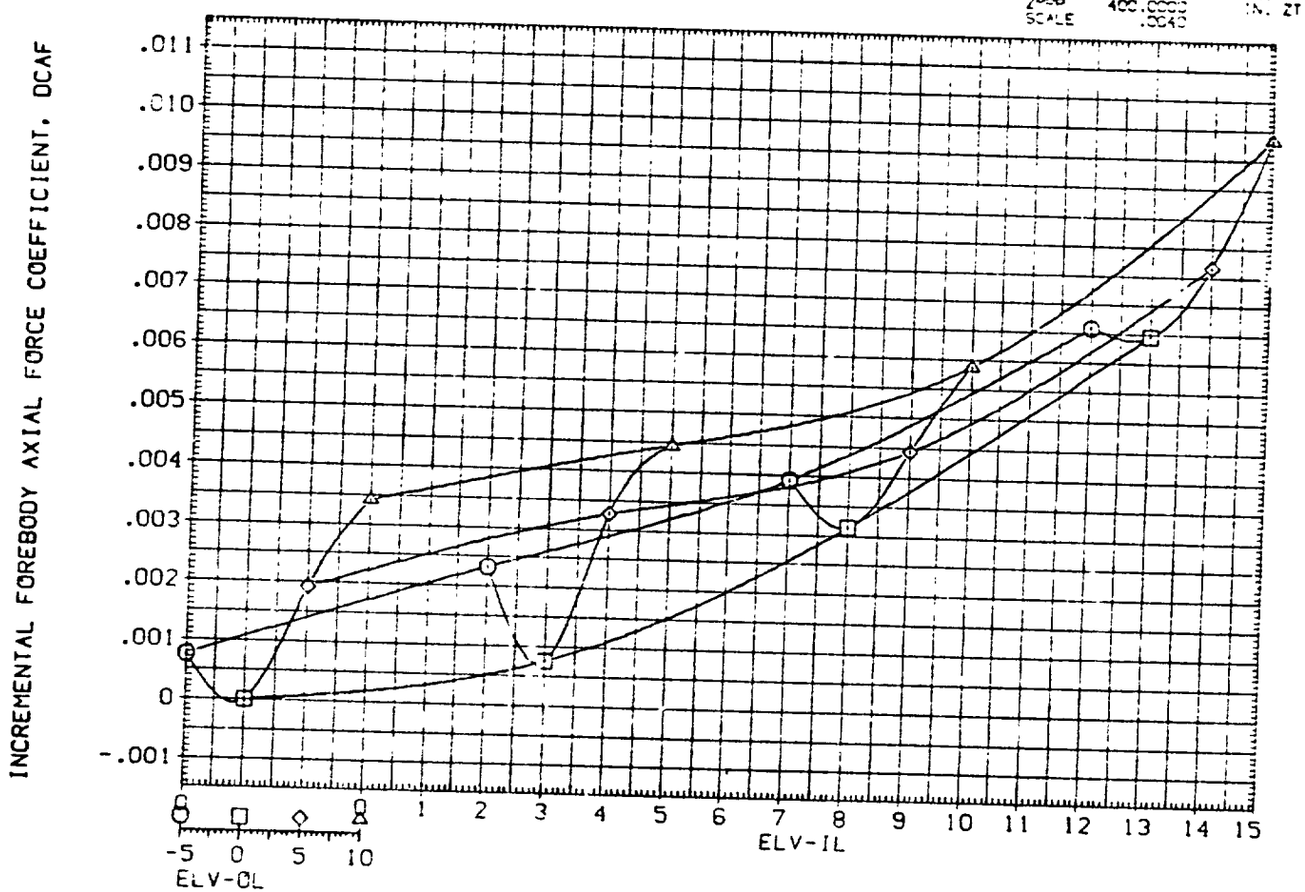
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 10.0(BINFSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
BREF	1290.0000	INCHES
CREF	1290.0000	INCHES
XMRP	975.0000	XT
YMRP	.0000	YT
ZMRP	400.0000	ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

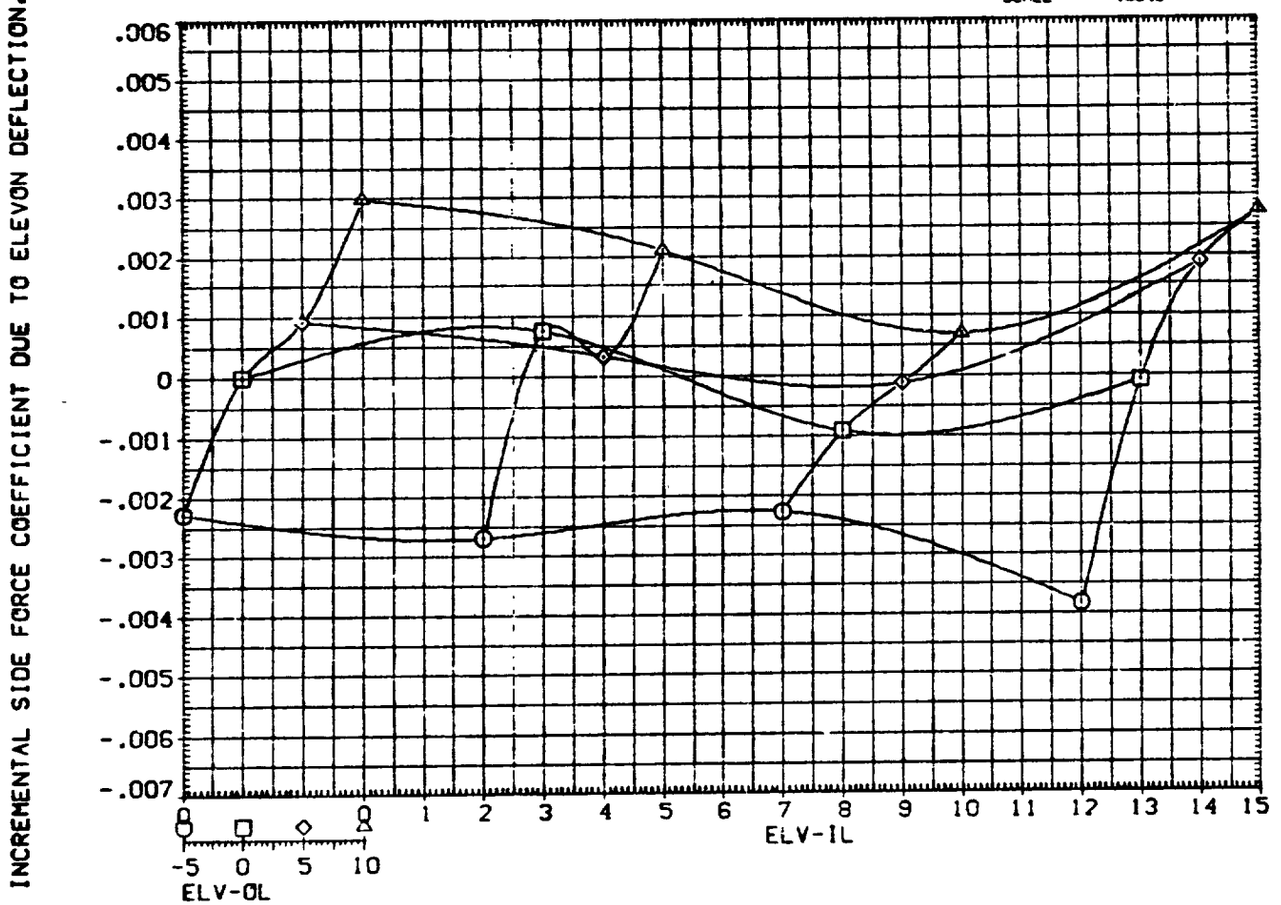
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 10.0(BINFSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.460	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

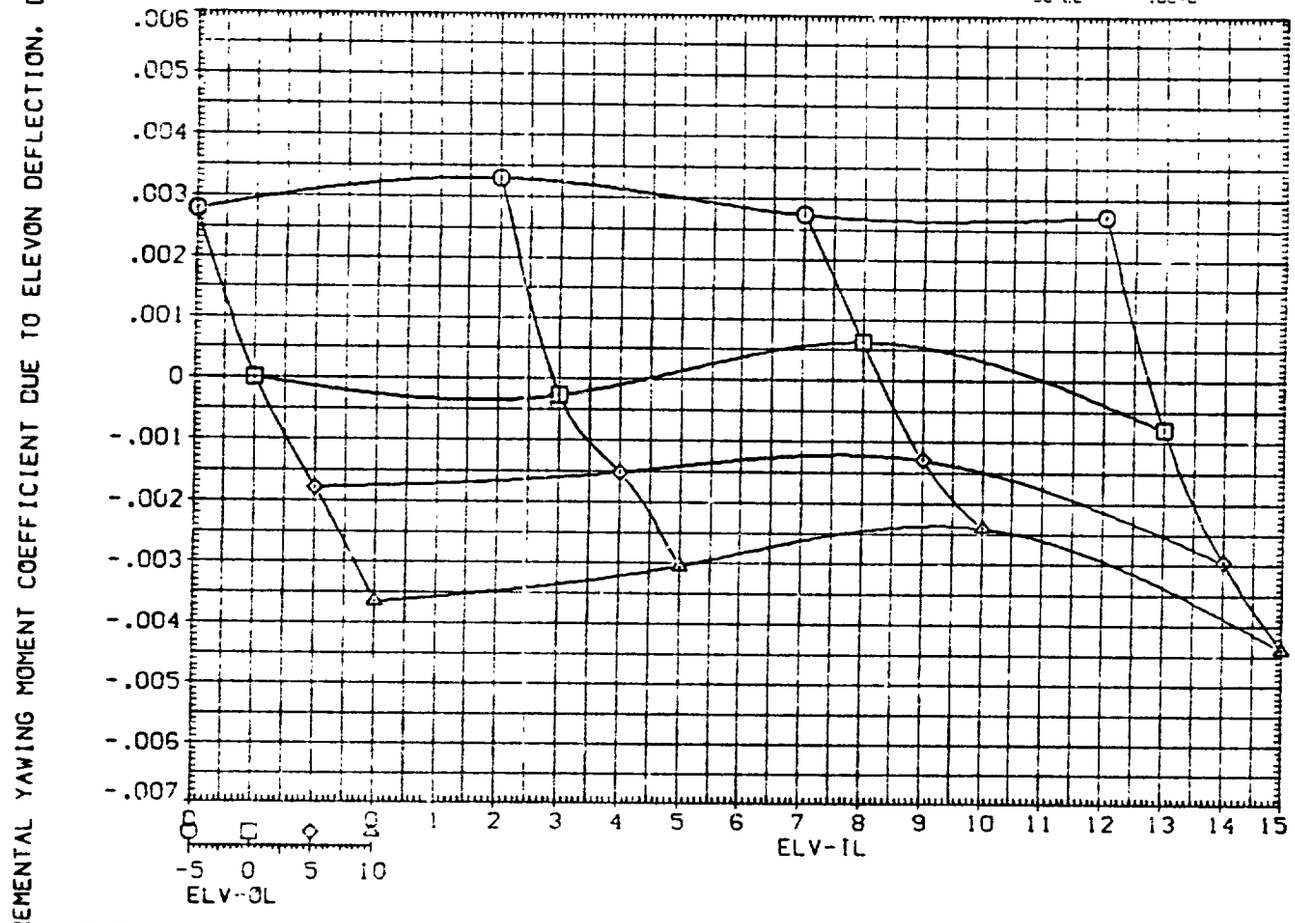
MSFC TWT 622 (IA125) 74 OTS. M=1.46. ALPHA= 10.0(B:NFSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.460	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
CREF	1200.0000	INCHES
BREF	1200.0000	INCHES
XMRP	976.0000	XX
YMRP	.0000	YY
ZMRP	400.0000	ZZ
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

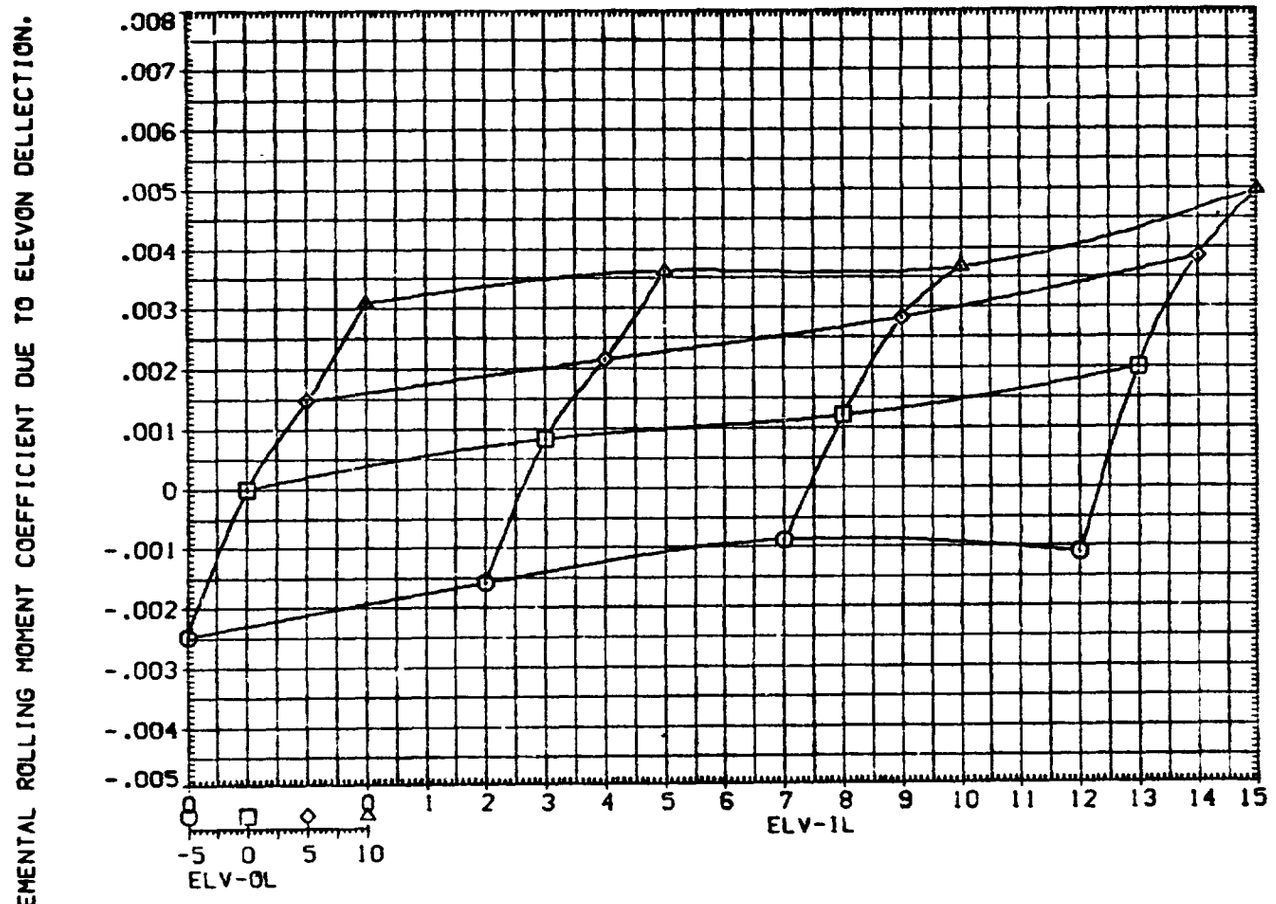
MSFC TWT 622 (!A125) 74 OTS. M=1.46. ALPHA= 10.0(BINFSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	1.460	ELV-1R	.000
ELV-0R	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 1.46

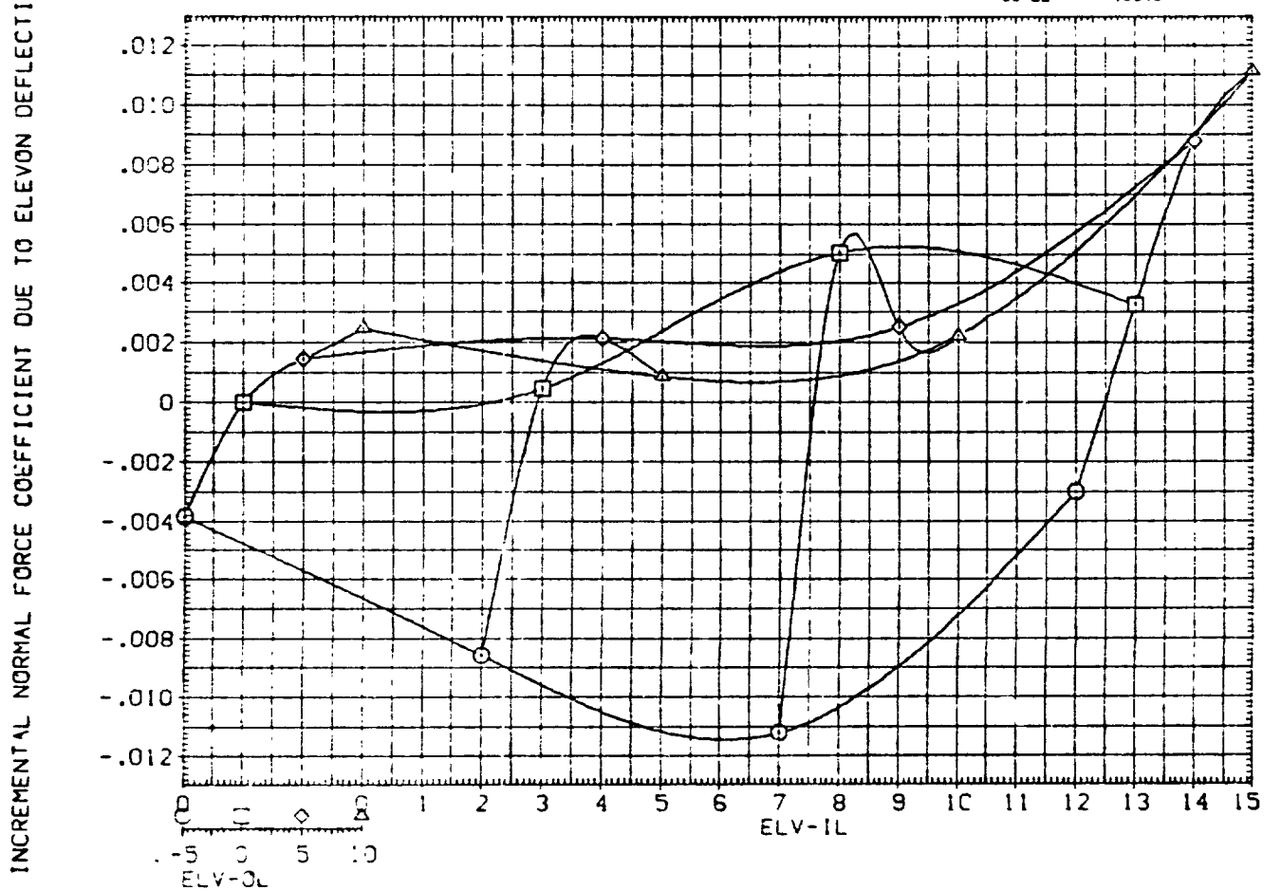
SFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-10.0(BINGSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1280.3000	FT.CHES
BREF	1280.3000	FT.CHES
XMRP	976.0000	FT. XT
YMRP	.0000	FT. YT
ZMRP	400.0000	FT. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

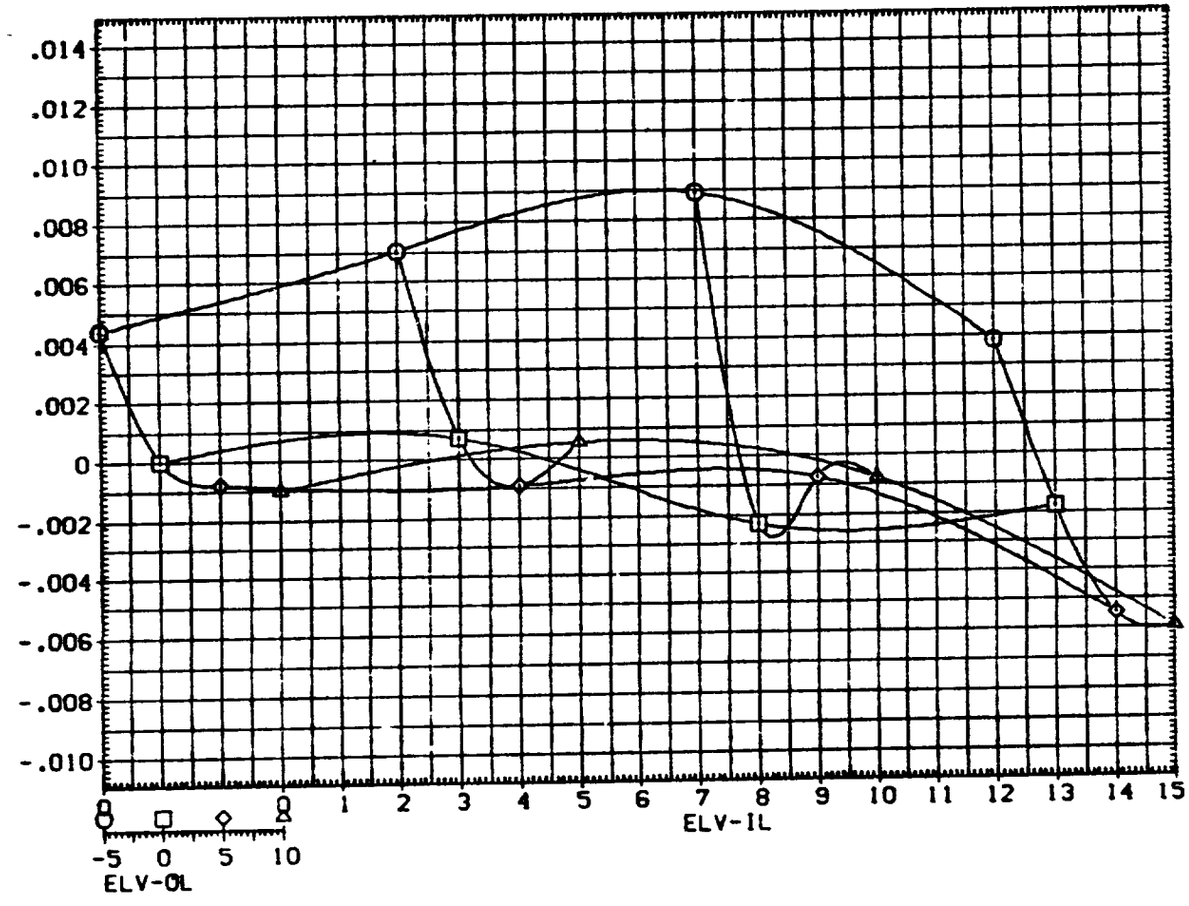
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-10.0(BINGSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

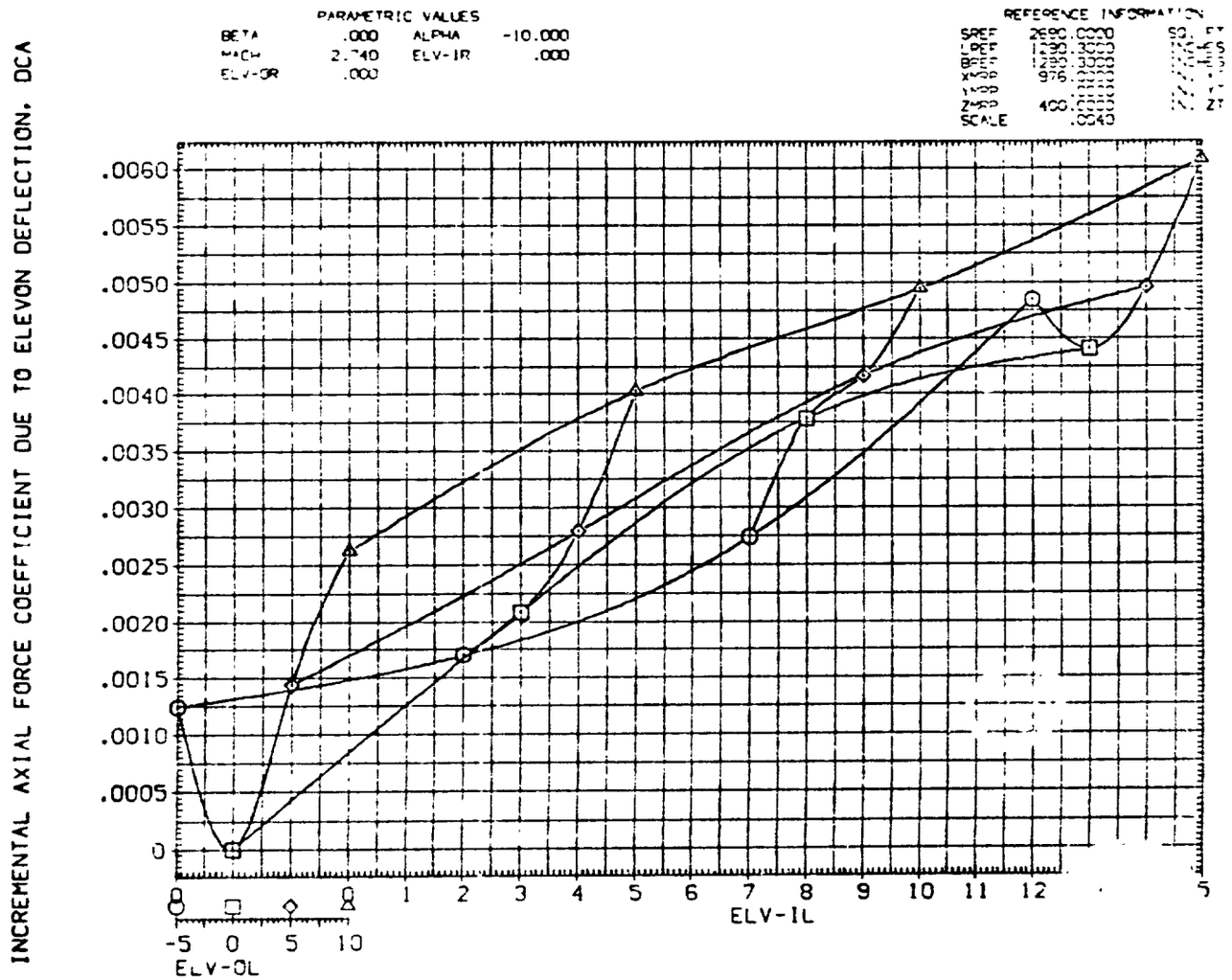
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-10.0(BINGSA)



ELEVON EFFECTIVENESS FOR MACH = 2.74

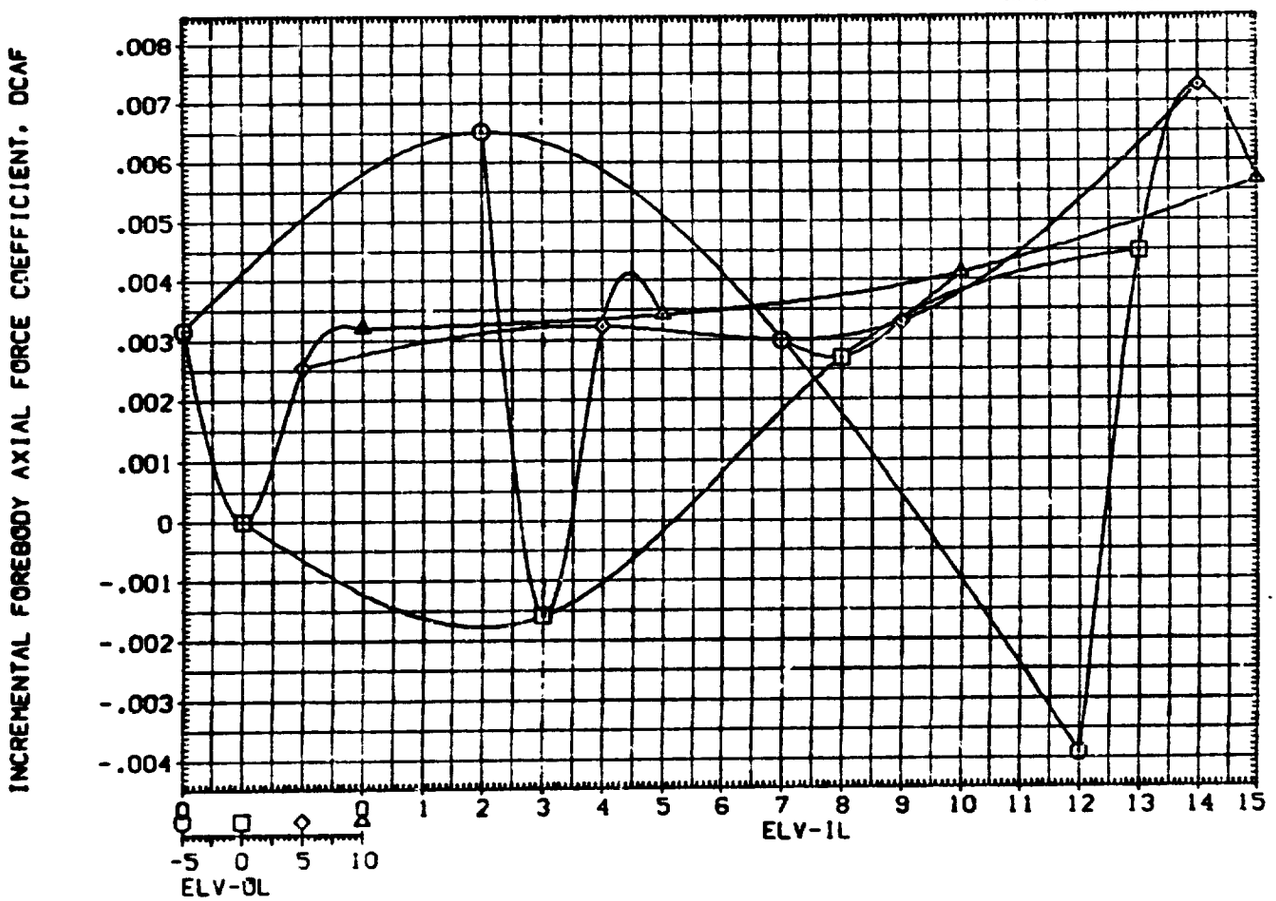
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-10.0(BINGSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

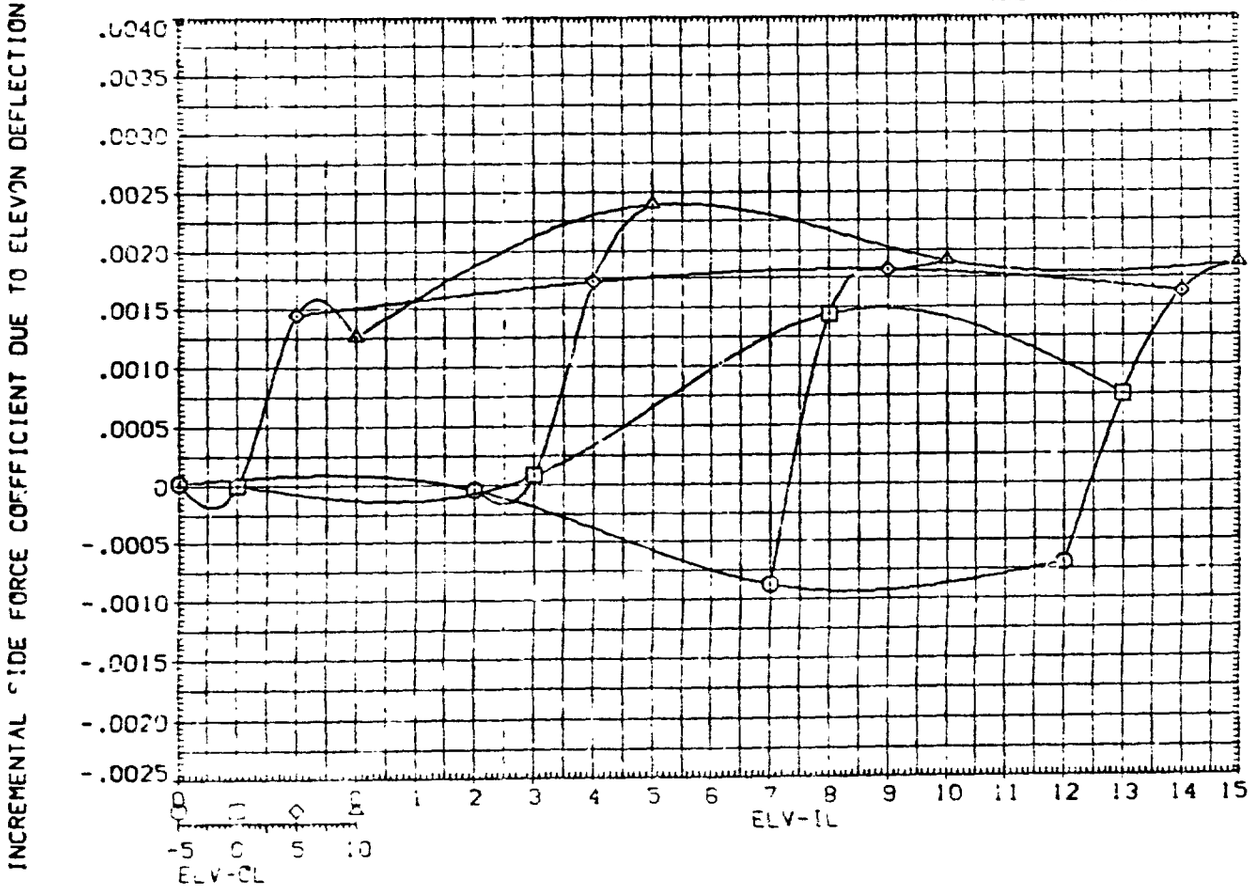
MSFC TWT 622 (IA125) 74 DTS. M-2.74. ALPHA=-10.0(BINGSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
LREF	1293.3000	INCHES
BREF	1293.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

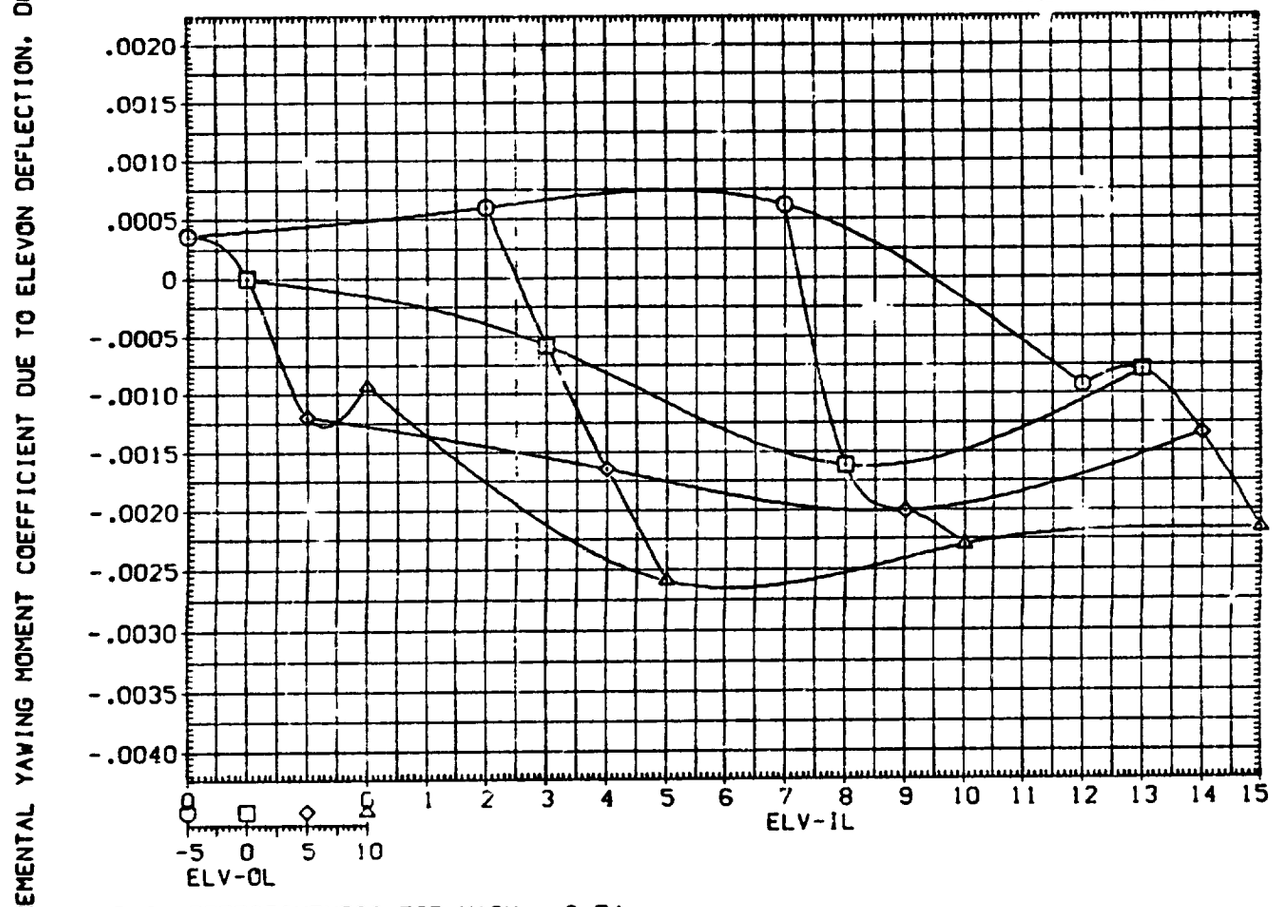
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-10.0(BINGSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

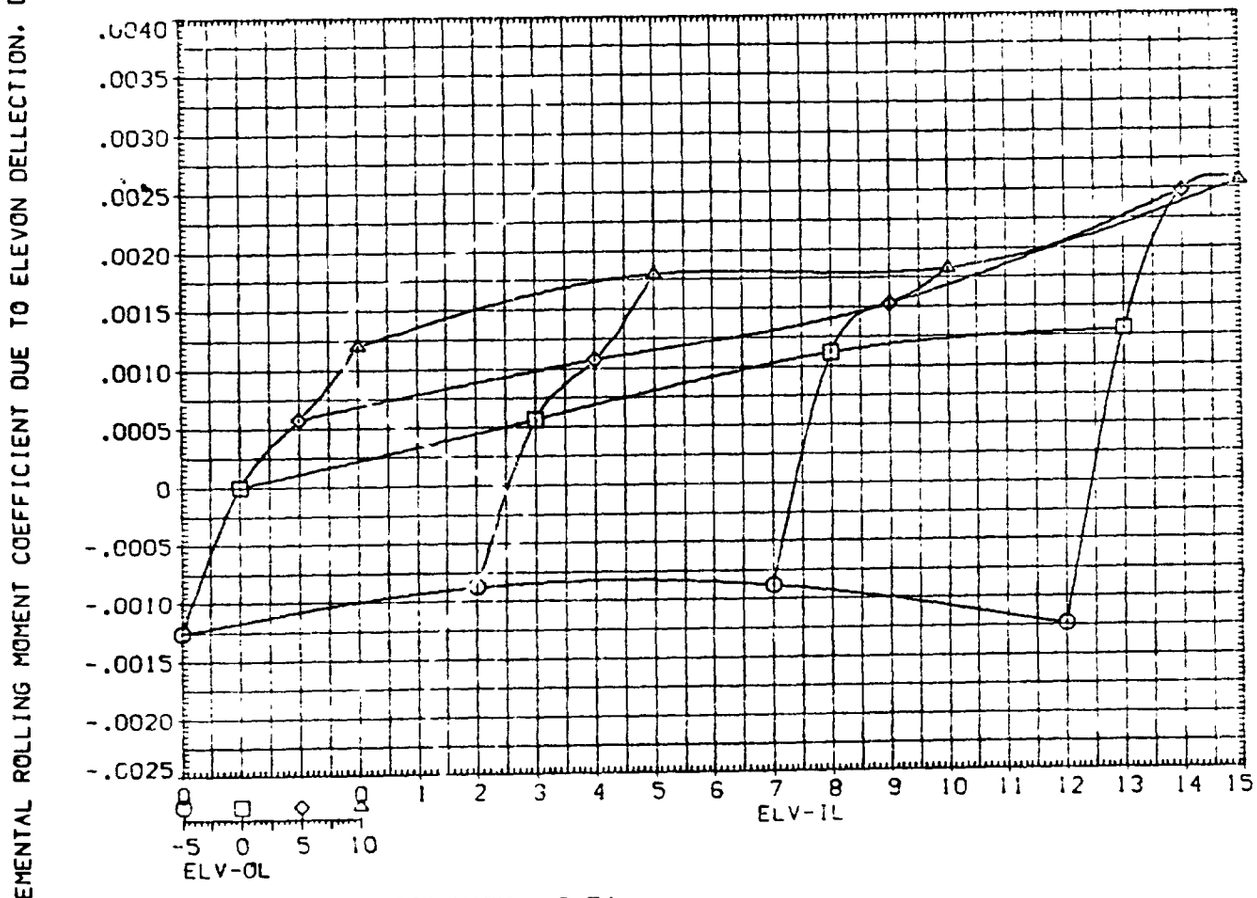
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-10.0(BINGSA)

PARAMETRIC VALUES

BETA	.000	ALPHA	-10.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
CREF	[illegible]	INCHES
BREF	[illegible]	INCHES
XMRP	976.0000	IN. XT
YMRP	[illegible]	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.5040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

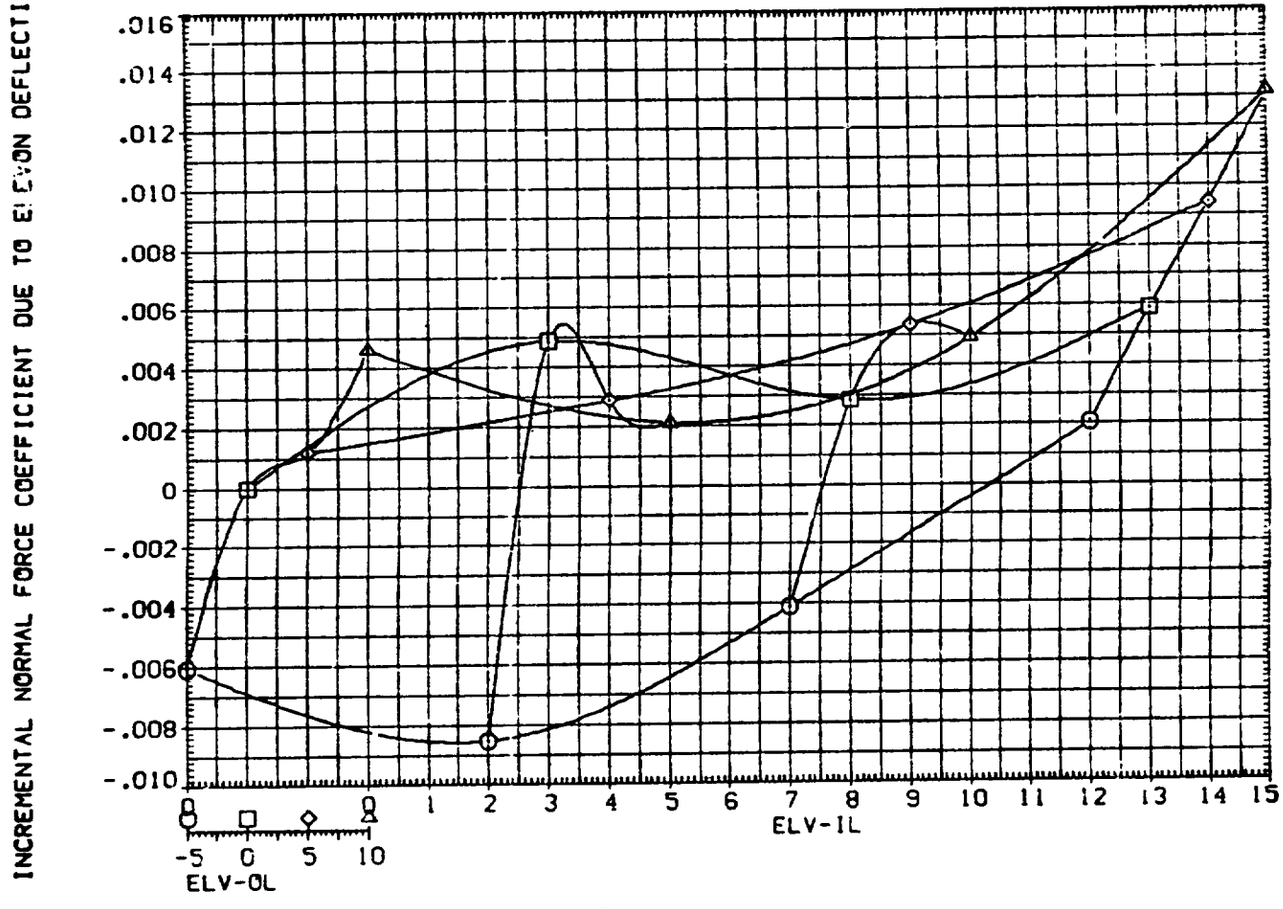
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-8.0 (BINGSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

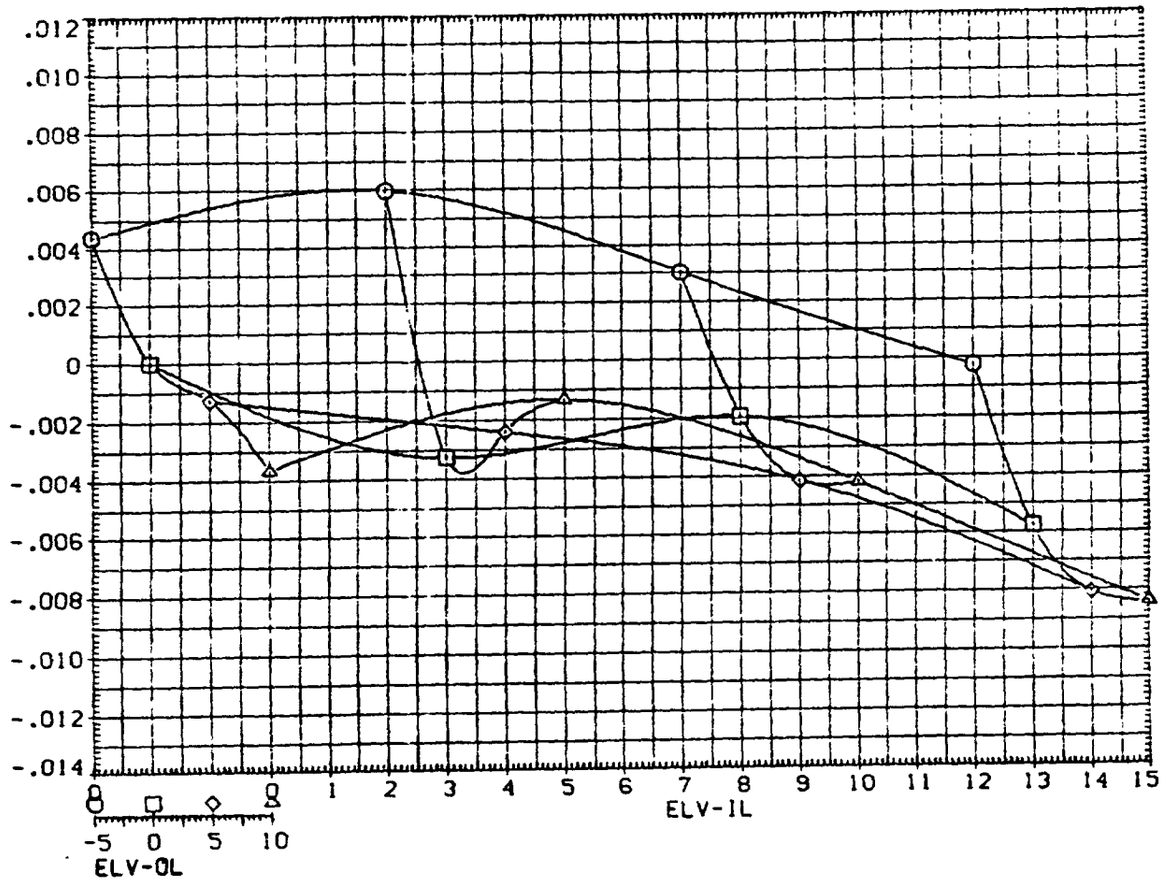
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-8.0 (81NGSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

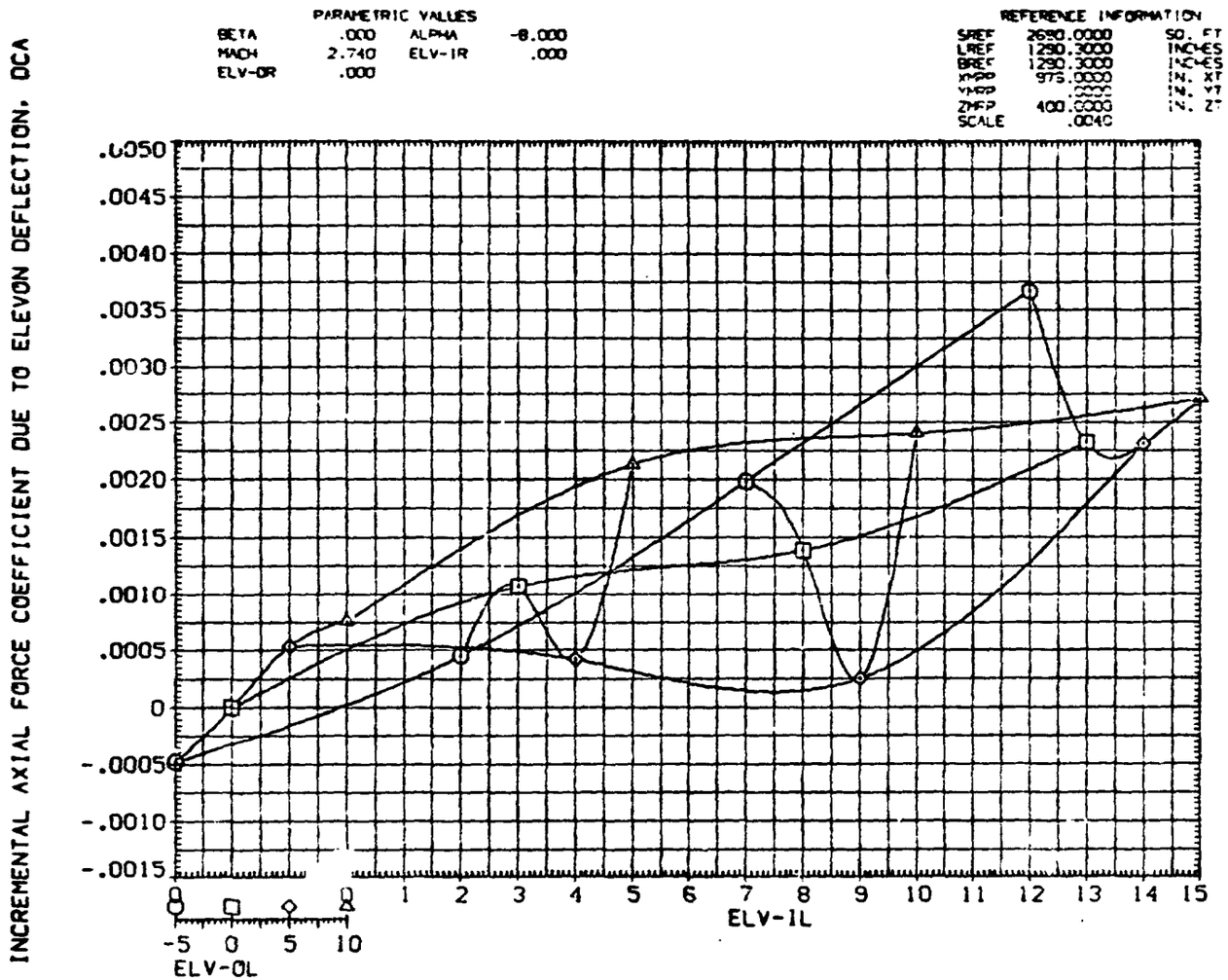
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
CREF	1280.0000	INCHES
BREF	1280.0000	INCHES
XMRP	976.0000	IN
YMRP	.0000	IN
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

MSFC TWT 622 (IA125) 74 OTS. M=2.74, ALPHA=-8.0 (BINGSB)



ELEVON EFFECTIVENESS FOR MACH = 2.74

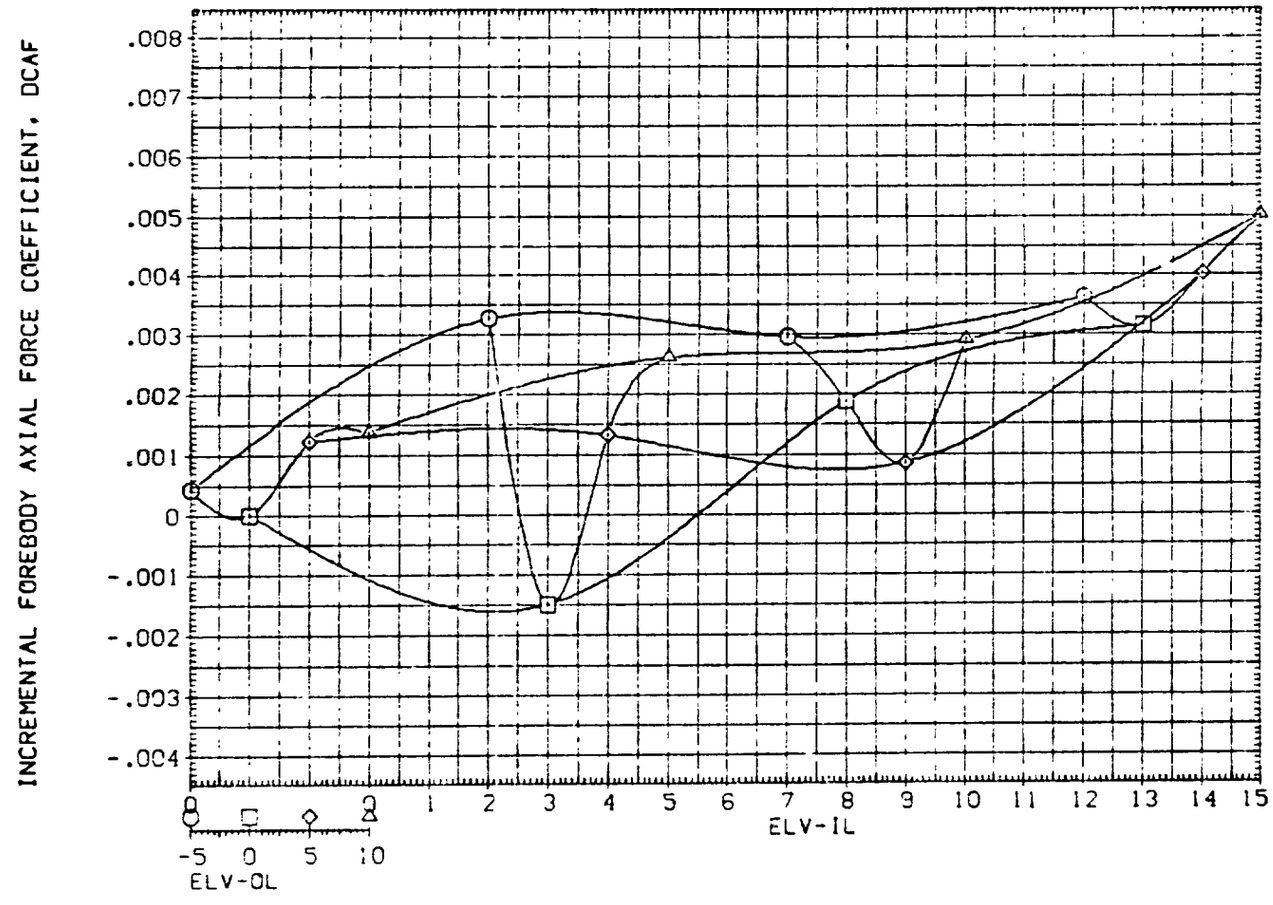
MSFC TWT 622 (IA125) T4 OTS. M=2.74. ALPHA=-8.0 (BINGSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

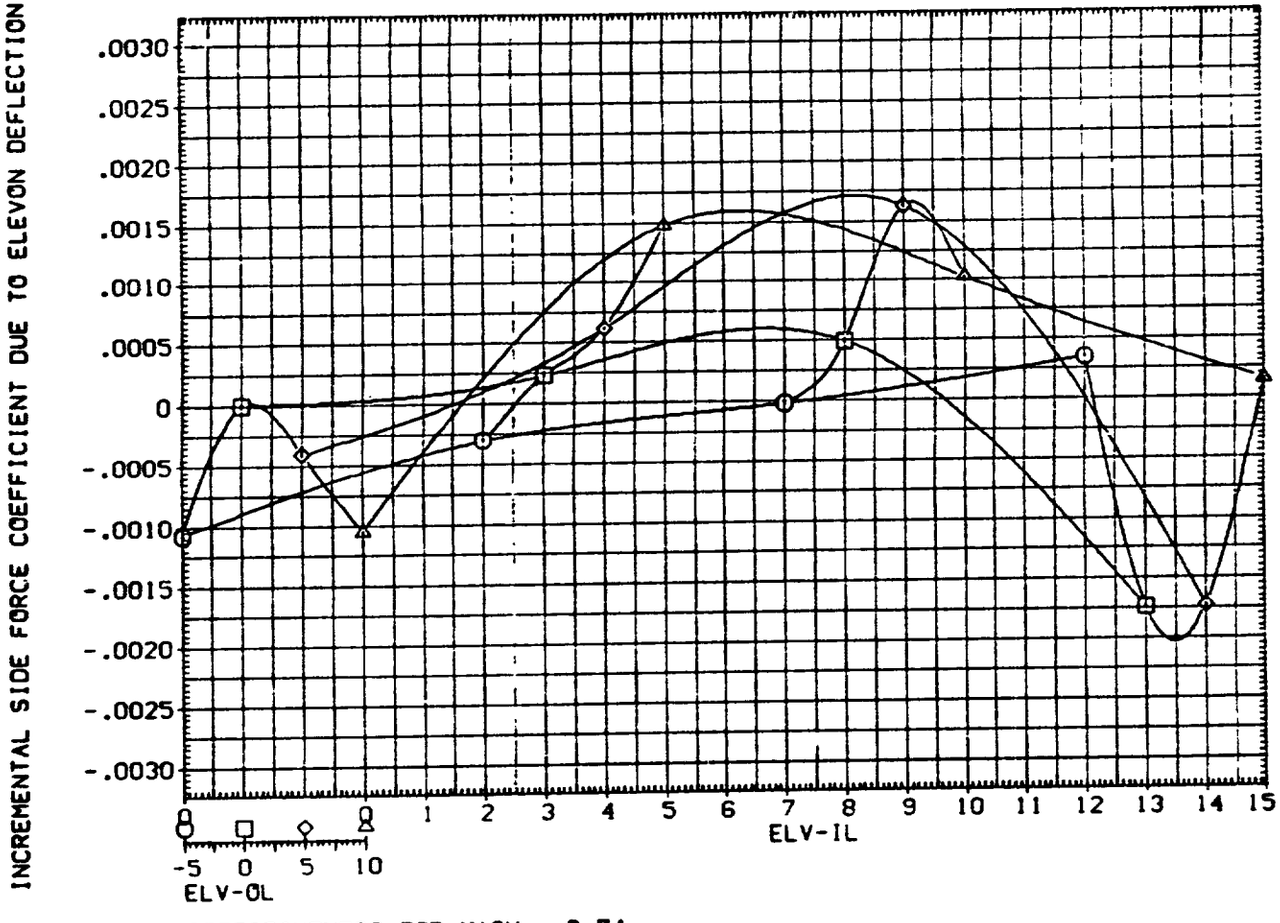
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-8.0 (BINGSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

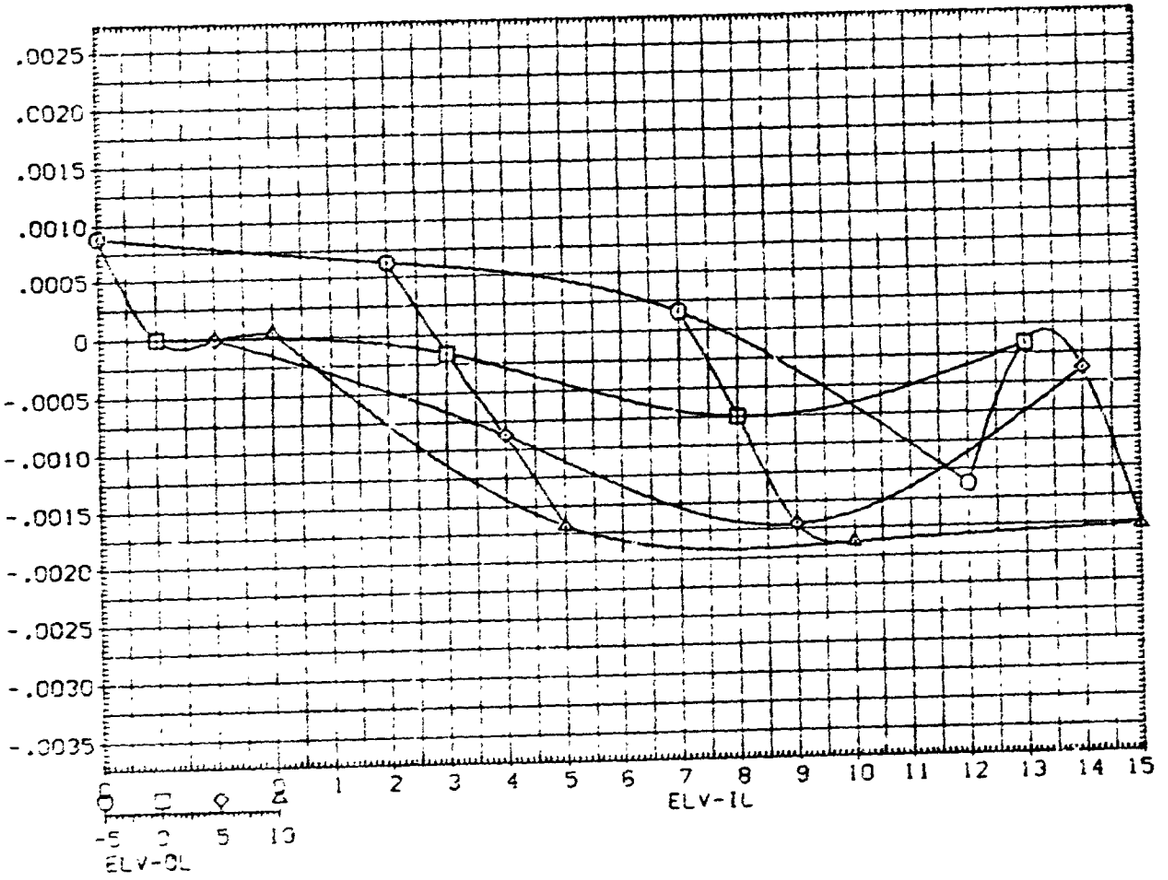
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-8.0 (BINGSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

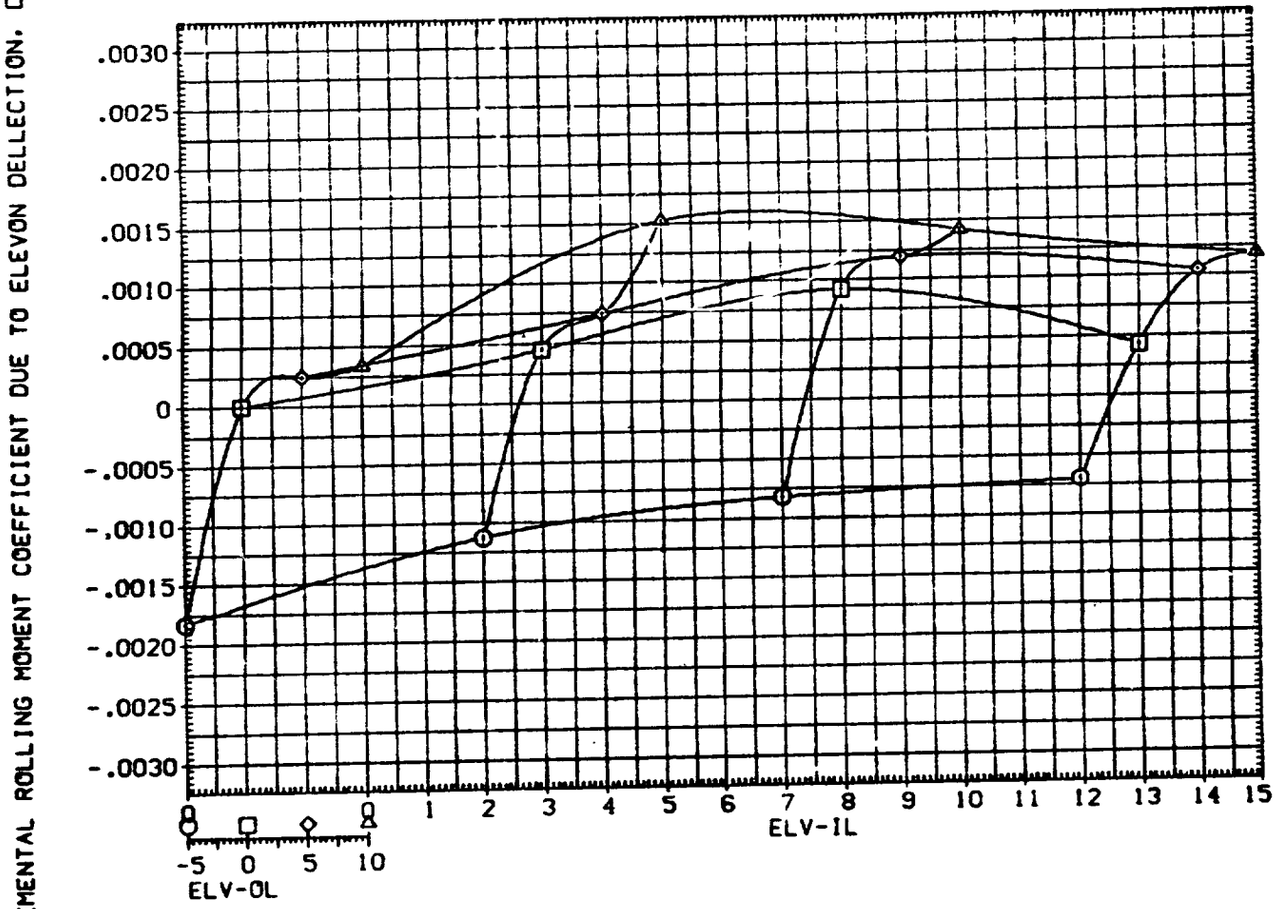
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-8.0 (BINGSB)

PARAMETRIC VALUES

BETA	.000	ALPHA	-8.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

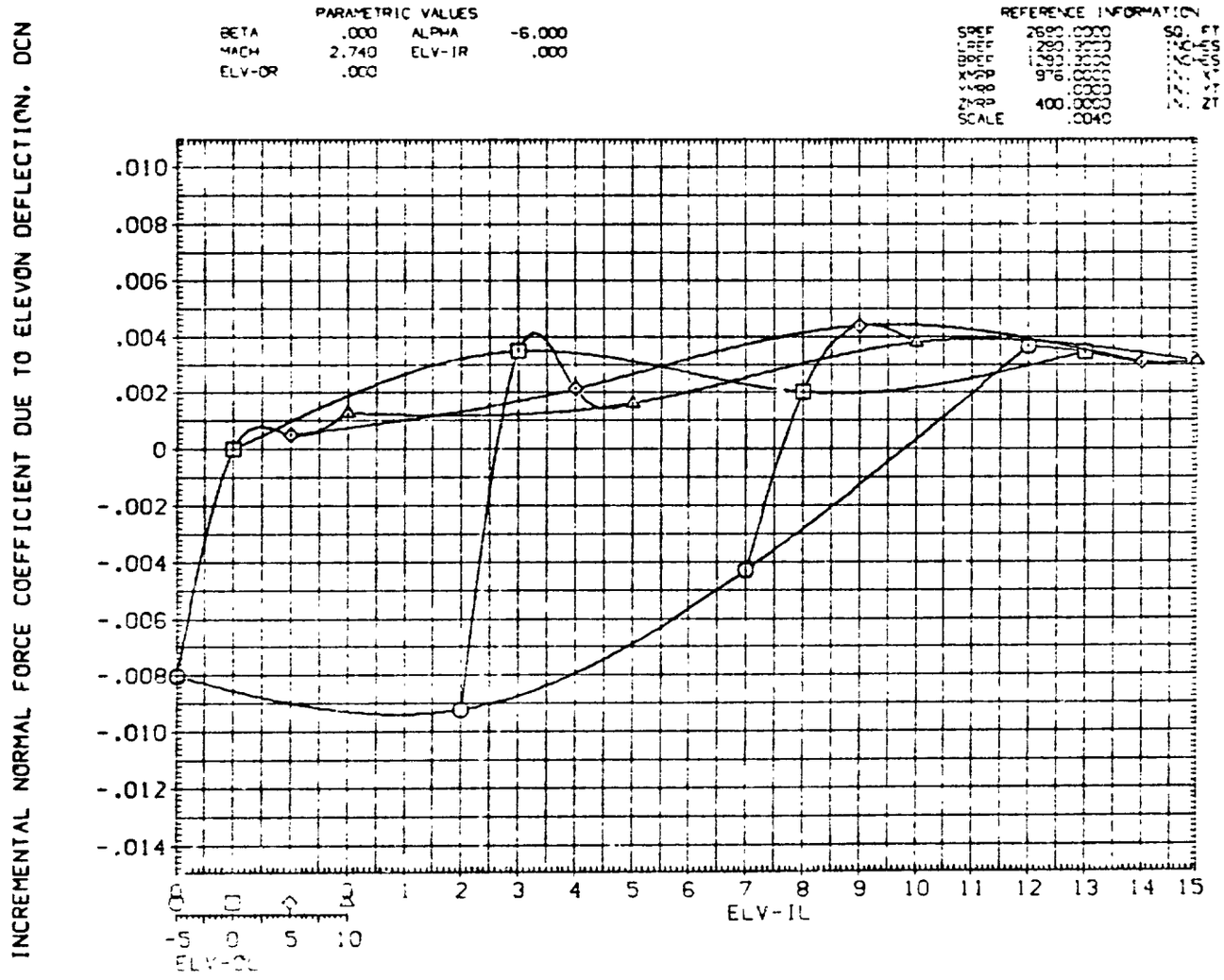
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-6.0 (BINGSC)



ELEVON EFFECTIVENESS FOR MACH = 2.74

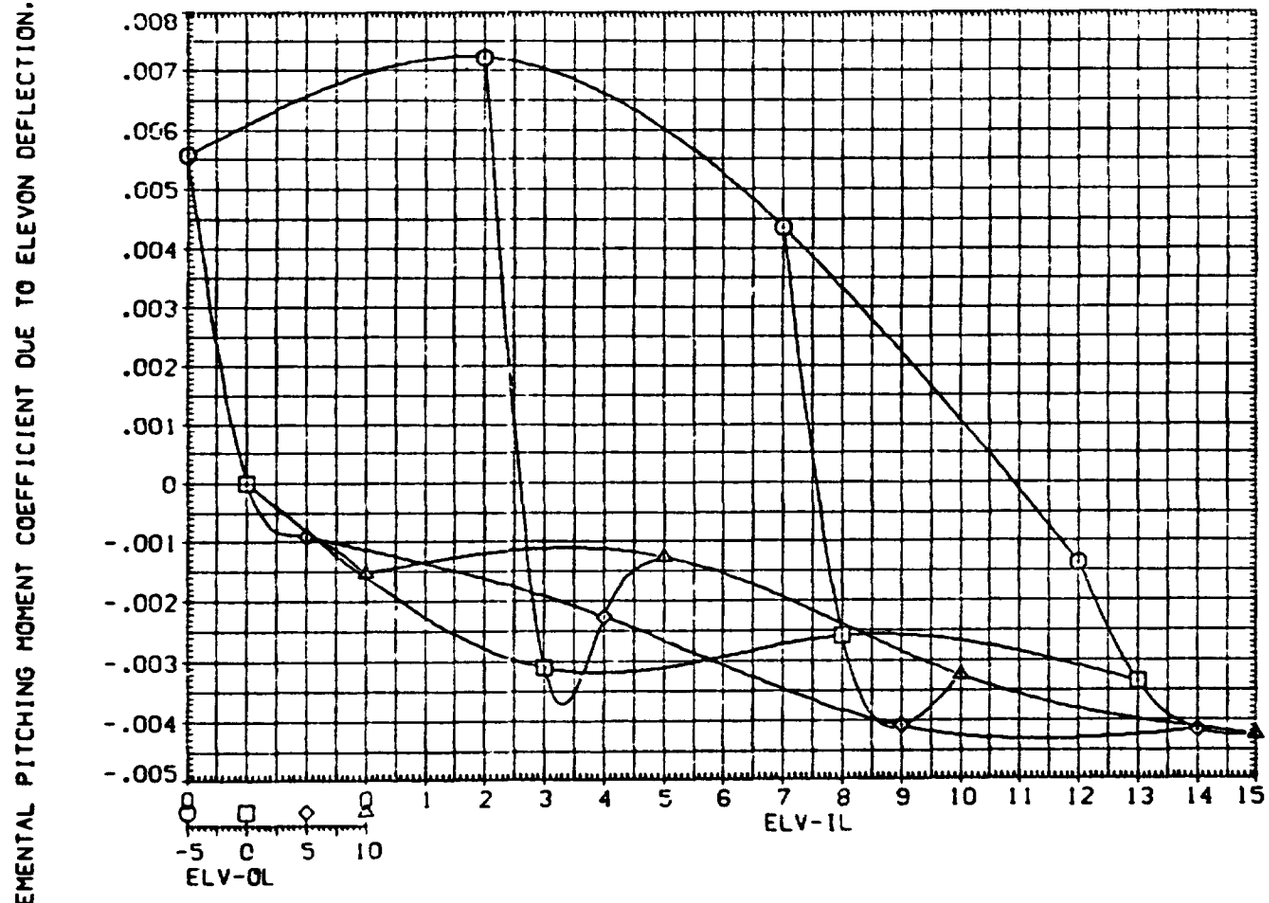
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-6.0 (BINGSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

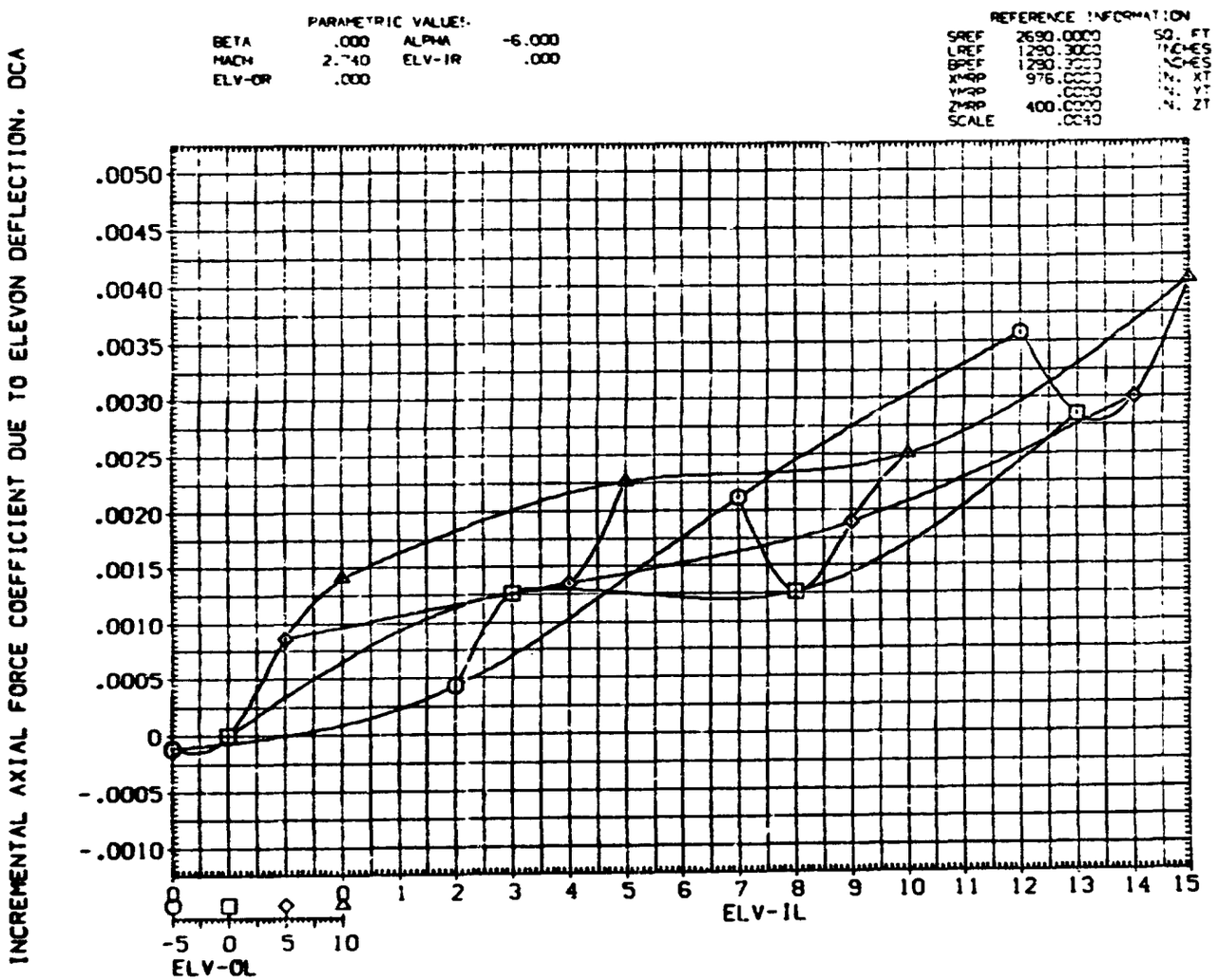
REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	780.0000	INCHES
BREF	1280.0000	INCHES
XMRP	975.0000	XT
YMRP	.0000	YT
ZMRP	400.0000	ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-6.0 (BINGSC)



ELEVON EFFECTIVENESS FOR MACH = 2.74

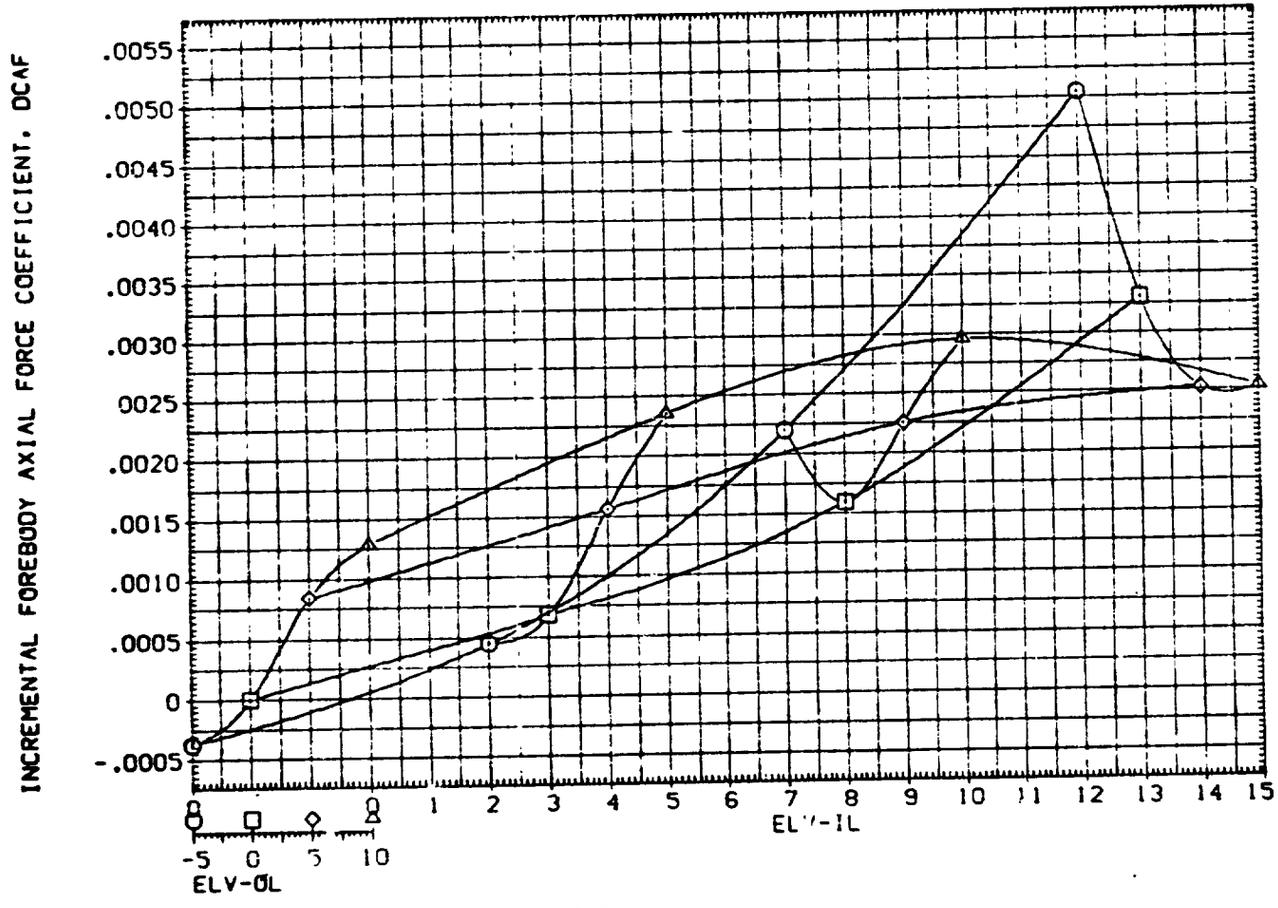
MSFC TWT 622 (IA125) 74 DTS. M=2.74. ALPHA=-6.0 (BINGSC)

PARAMETER VALUES

BETA	.000	ALPHA	-6.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2692.0000	SQ. FT
LREF	[illegible]	[illegible]
BREF	[illegible]	[illegible]
XMRP	976.0000	[illegible]
YMRP	.0000	[illegible]
ZMRP	400.0000	[illegible]
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

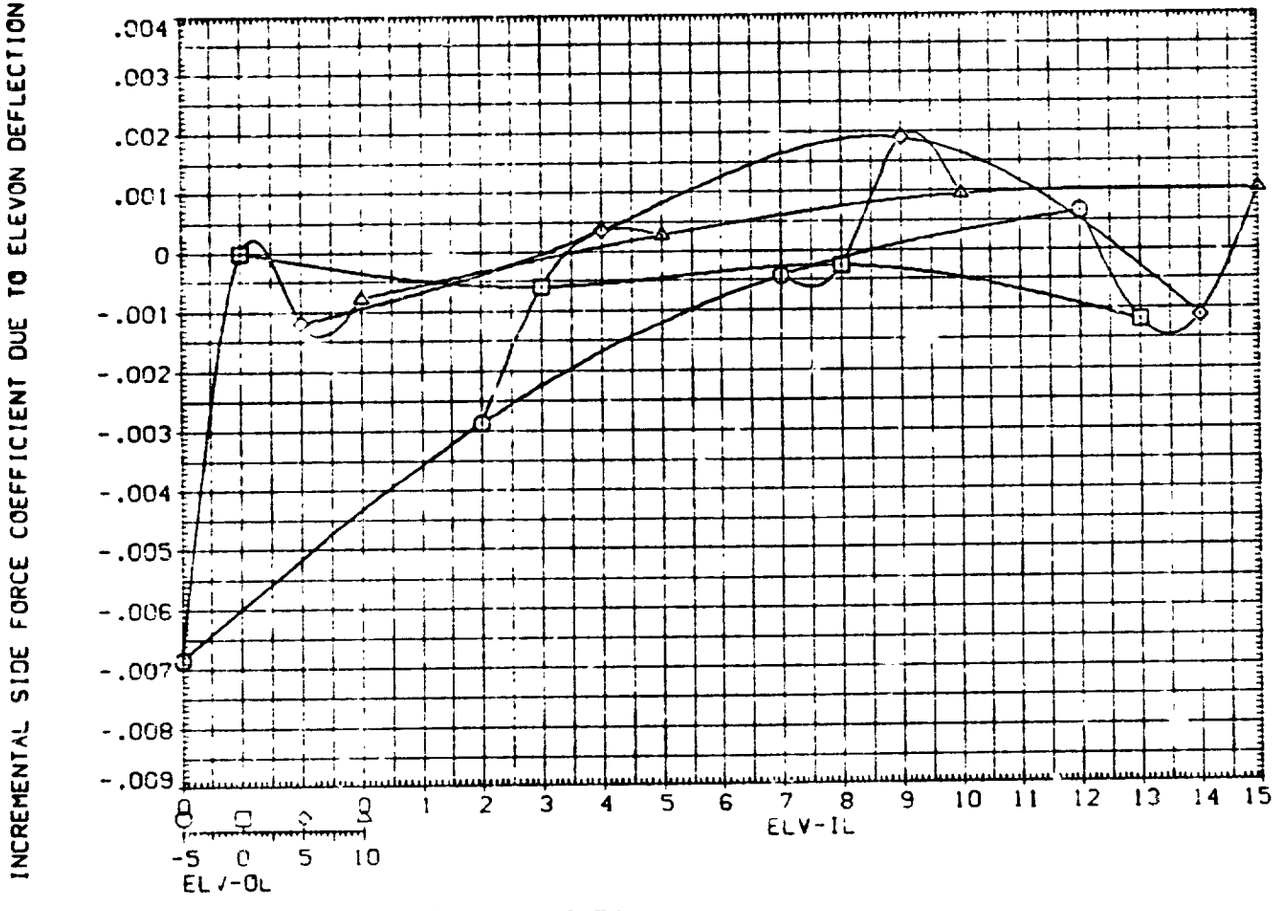
MSFC TAT 622 (IA125) 74 OTS. M=2.74, ALPHA=-6.0 (BINGSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
CREF	1200.0000	INCHES
BREF	1200.0000	INCHES
XMRP	950.0000	IN. XT
YMRP	0.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	1.0000	



ELEVON EFFECTIVENESS FOR MACH = 2.74

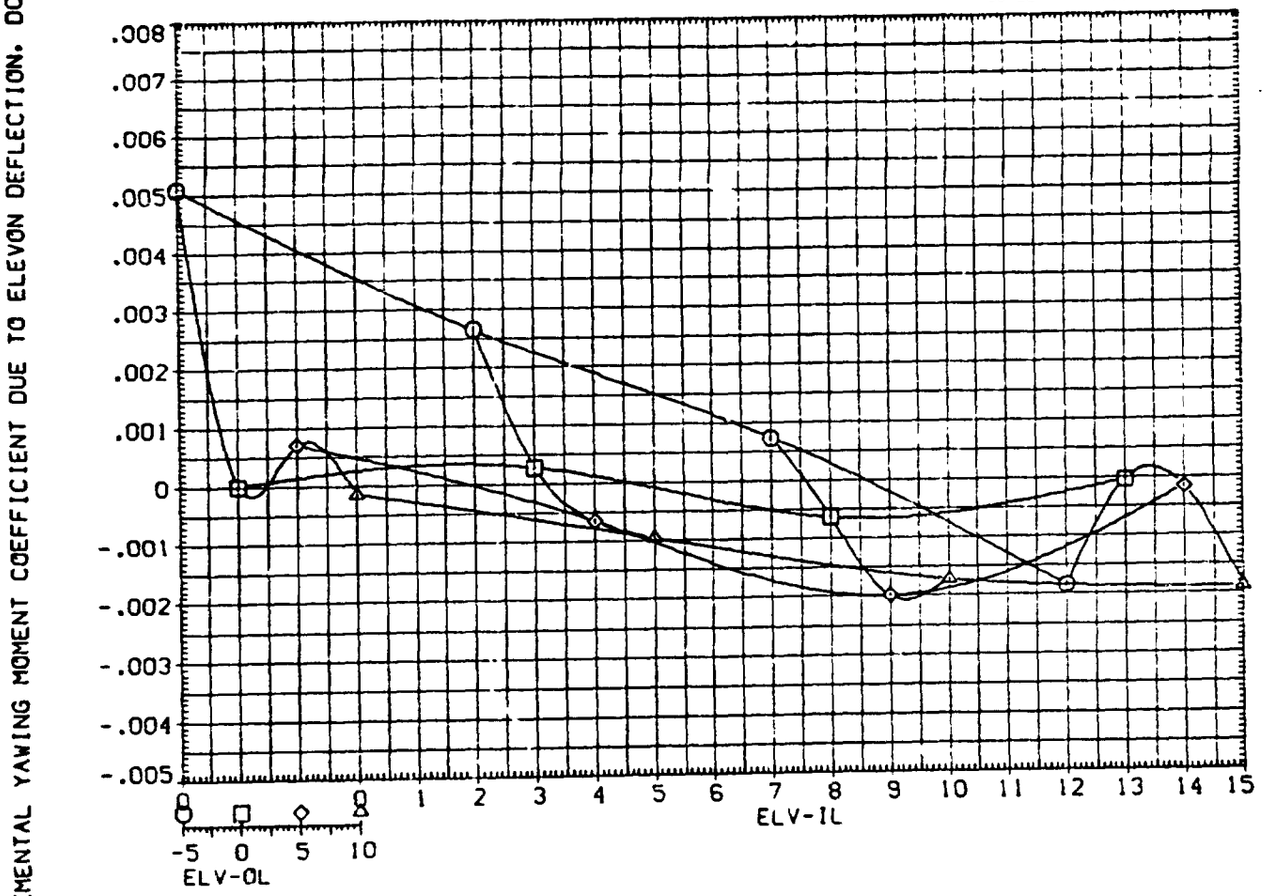
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-6.0 (BINGSC)

PARAMETRIC VALUES

BETA	.000	ALPHA	-6.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

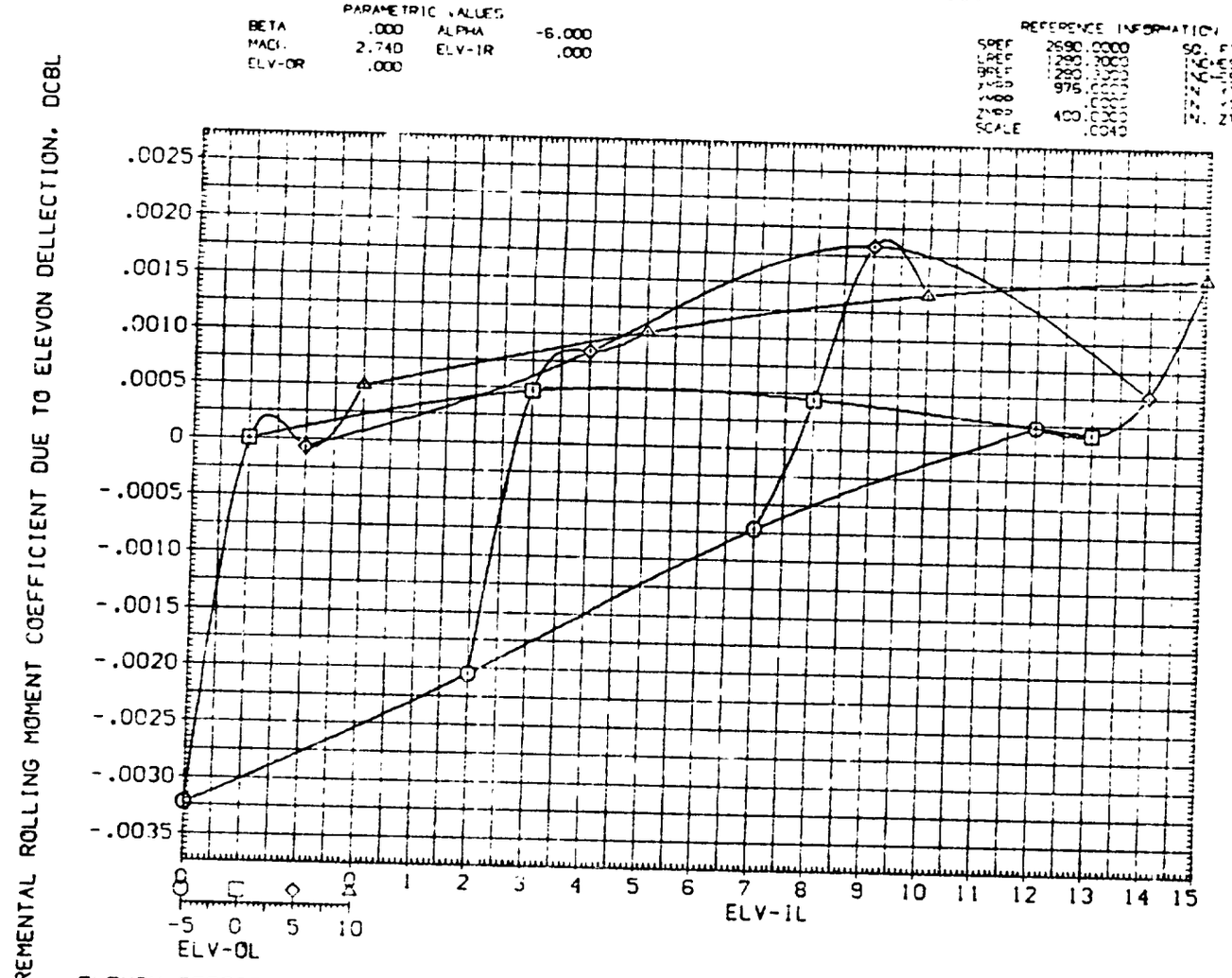
REFERENCE INFORMATION

SREF	[illegible]	SQ. FT
LREF	[illegible]	[illegible]
BREF	[illegible]	[illegible]
XMRP	976.	IN. XT
YMRP	[illegible]	IN. YT
ZMRP	400.	IN. ZT
SCALE	.0040	

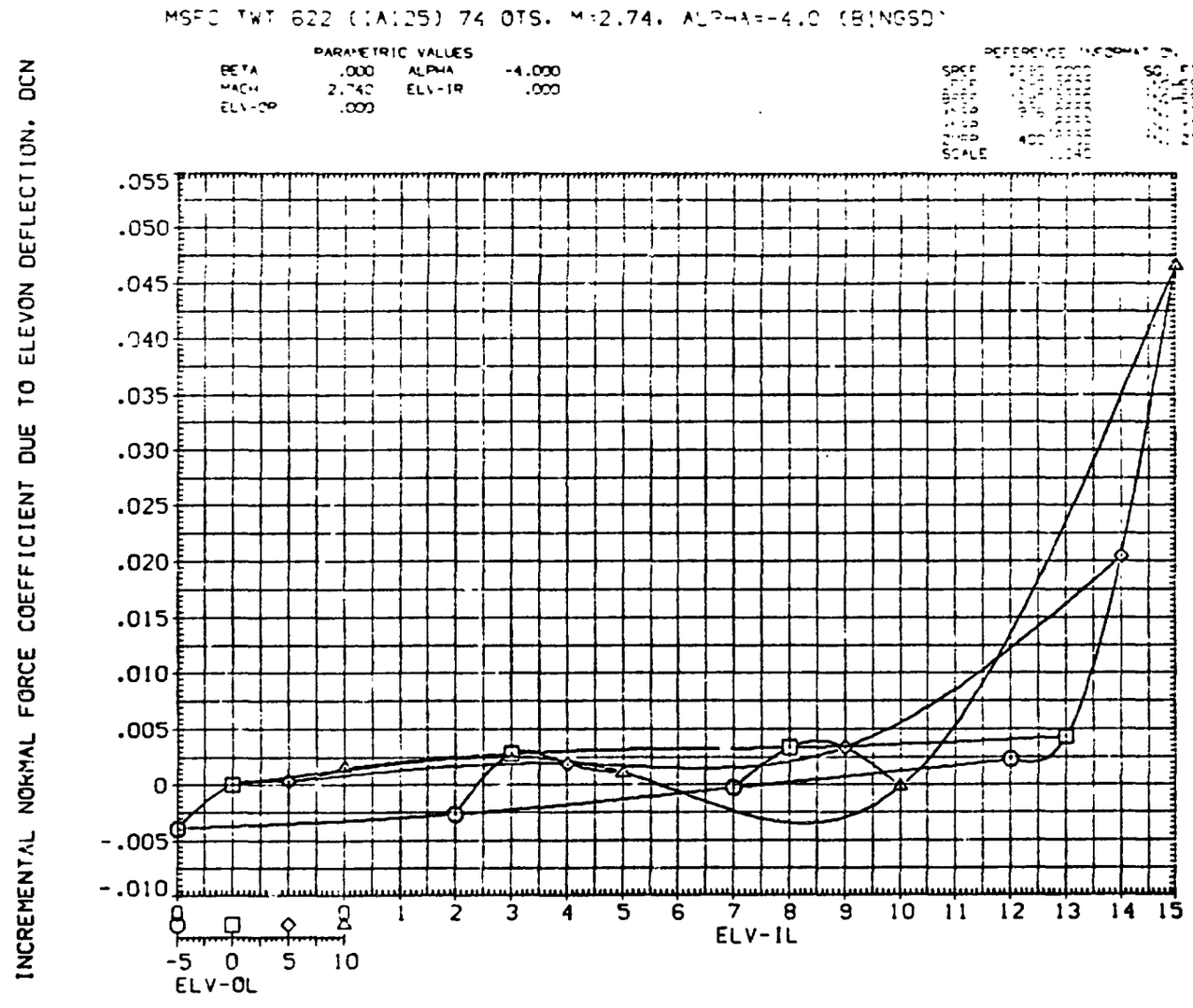


ELEVON EFFECTIVENESS FOR MACH = 2.74

MSFC TWT 622 (IA125) 74 OTS. M=2.74, ALPHA=-6.0 (BINGSC)



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

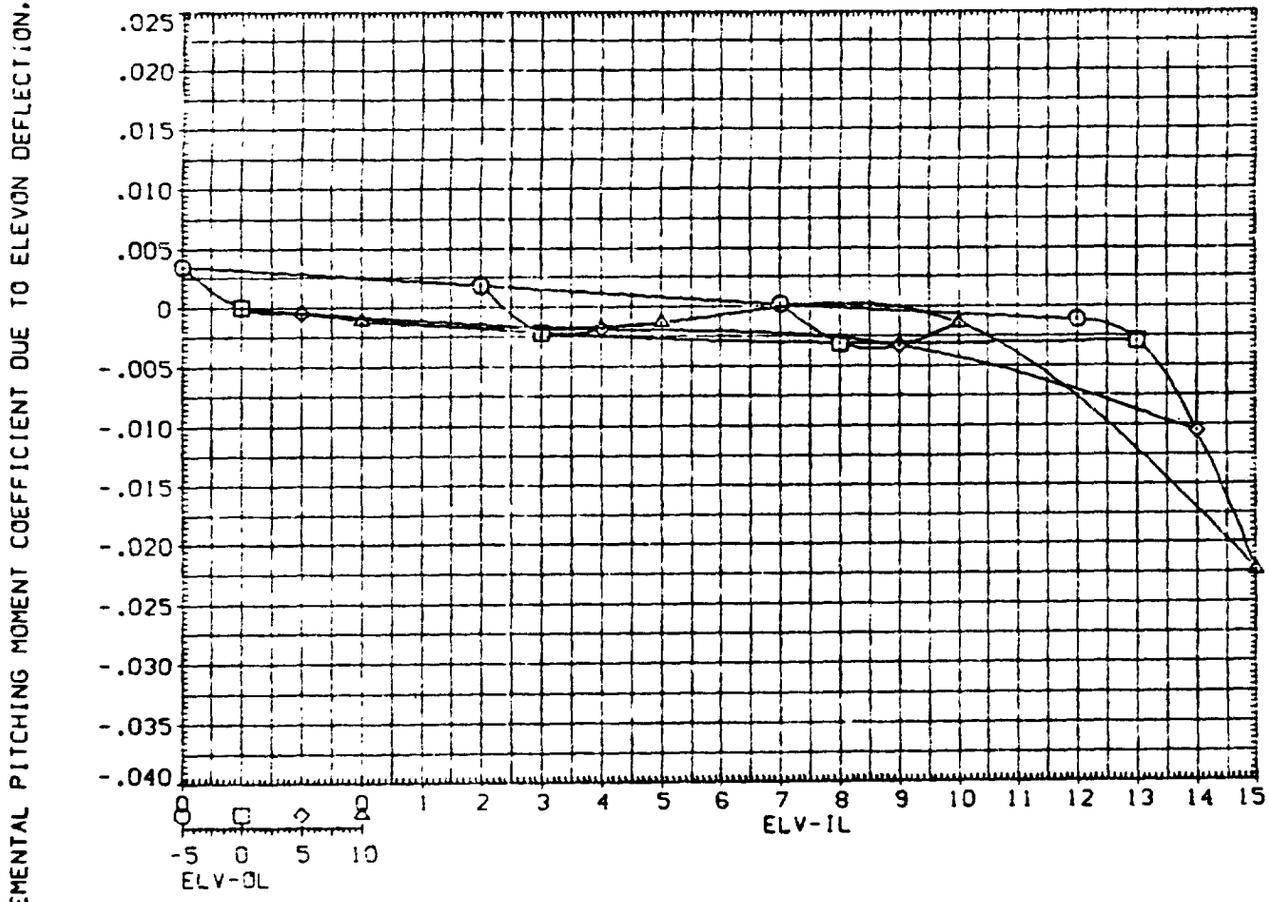
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-4.0 (BINGSD)

PARAMETRIC VALUES

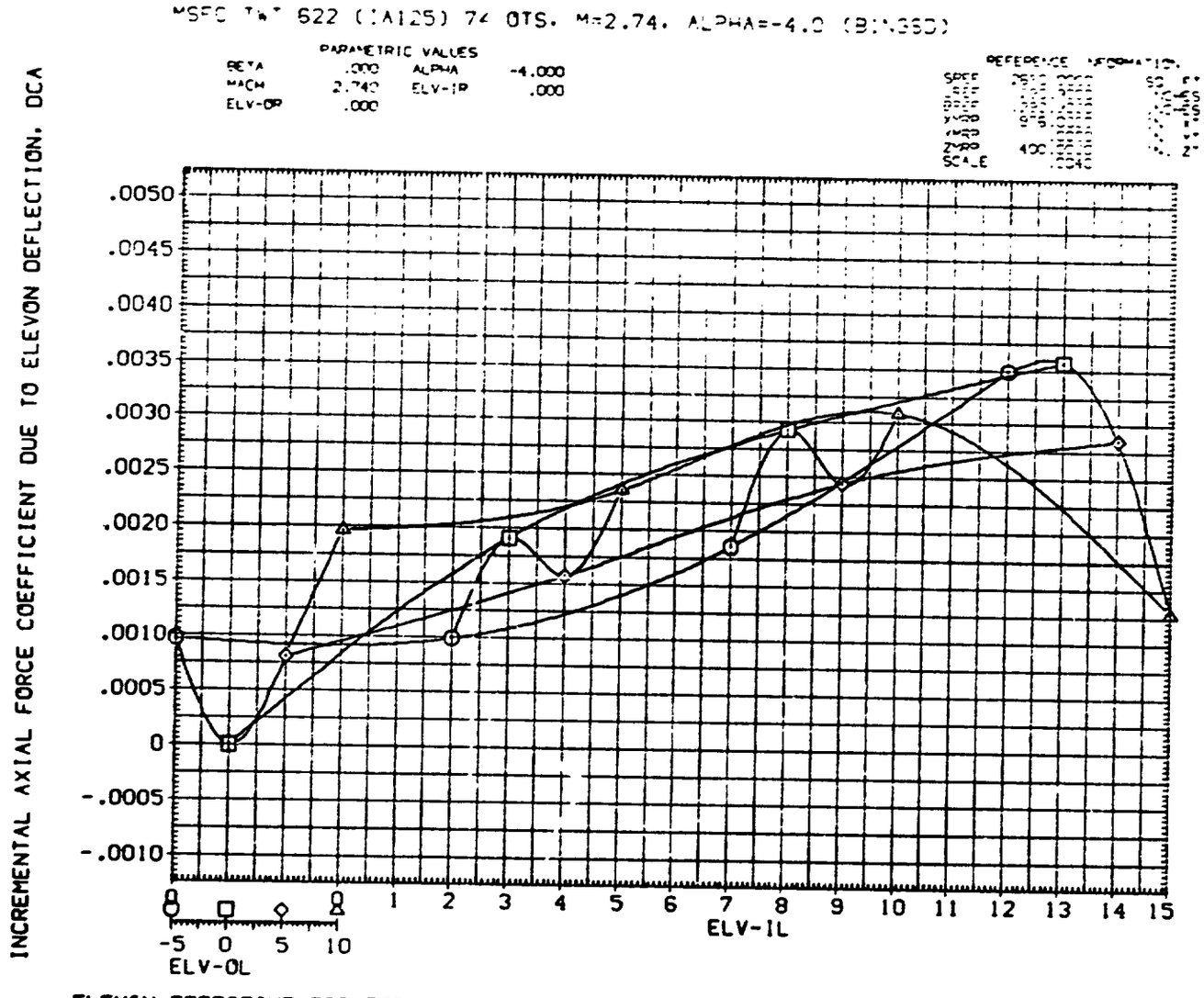
BETA	.000	ALPHA	-4.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

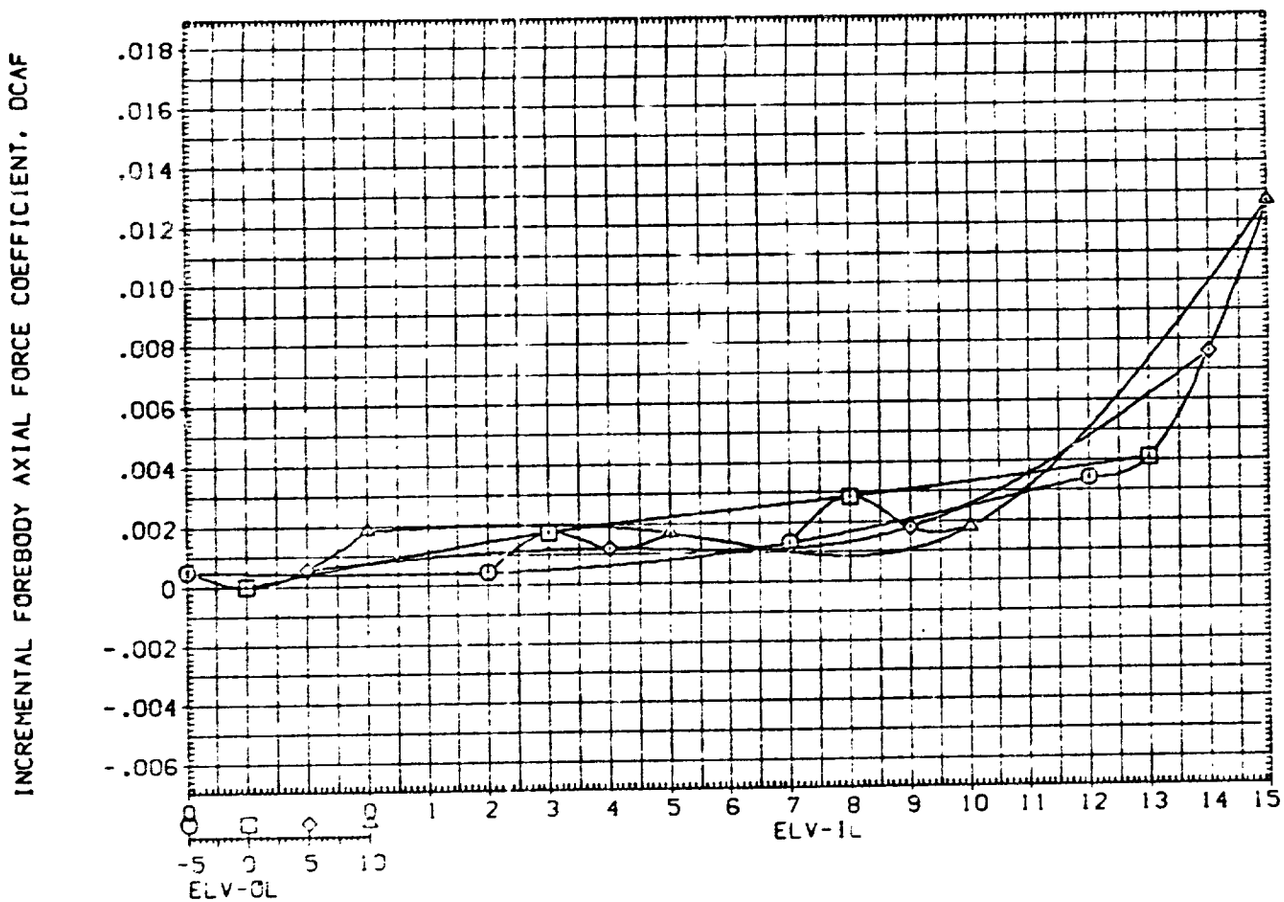
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-4.0 (BINGSD)

PARAMETRIC VALUES

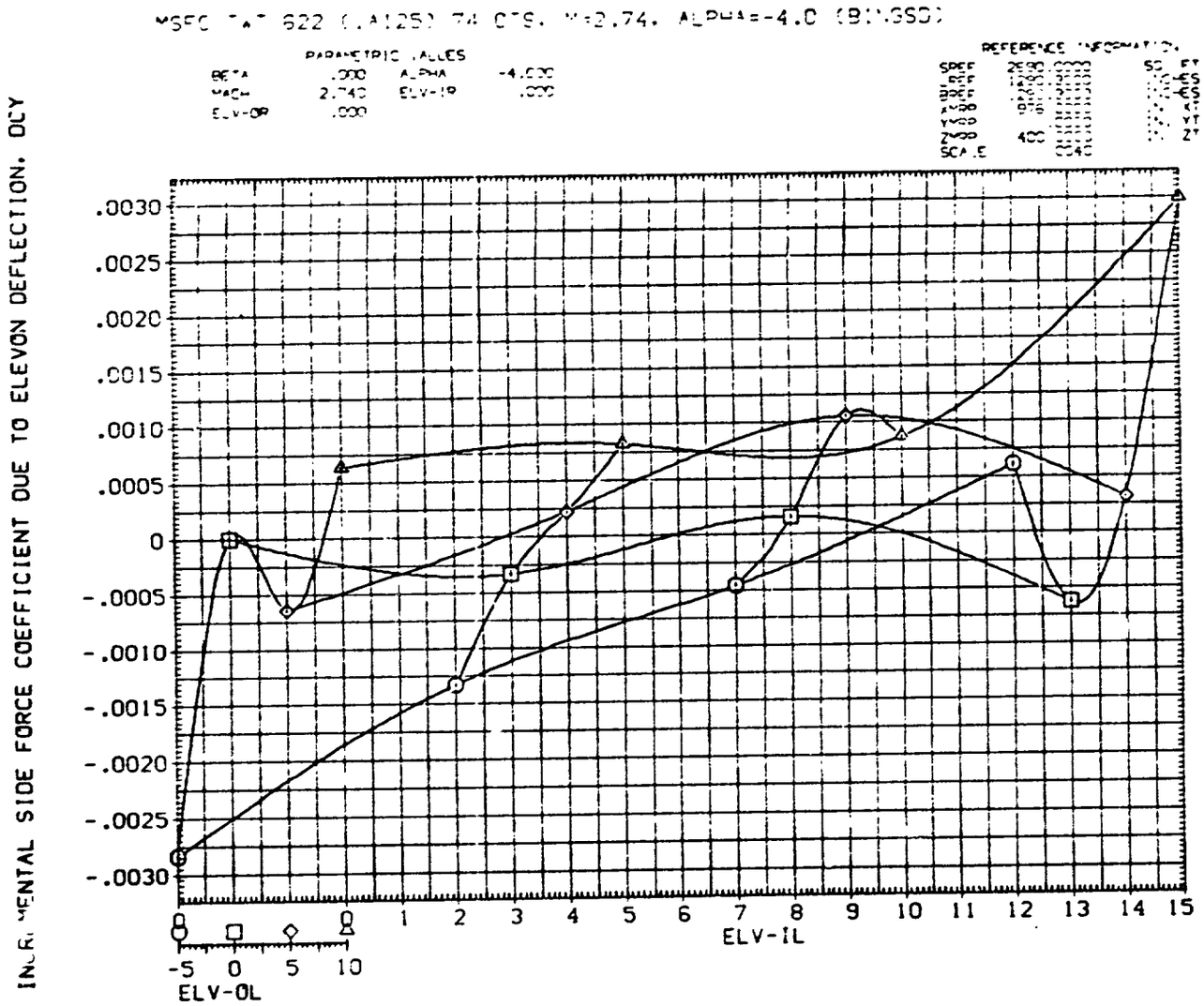
BETA	.000	ALPHA	-4.000
MACH	2.740	ELV-IB	.000
ELV-OB	.000		

REFERENCE INFORMATION

SREF	2680.0000	SQ. FT
LREF	1290.0000	IN.
BREF	1290.0000	IN.
XMRP	976.0000	IN. XT
YMRP	.0000	
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

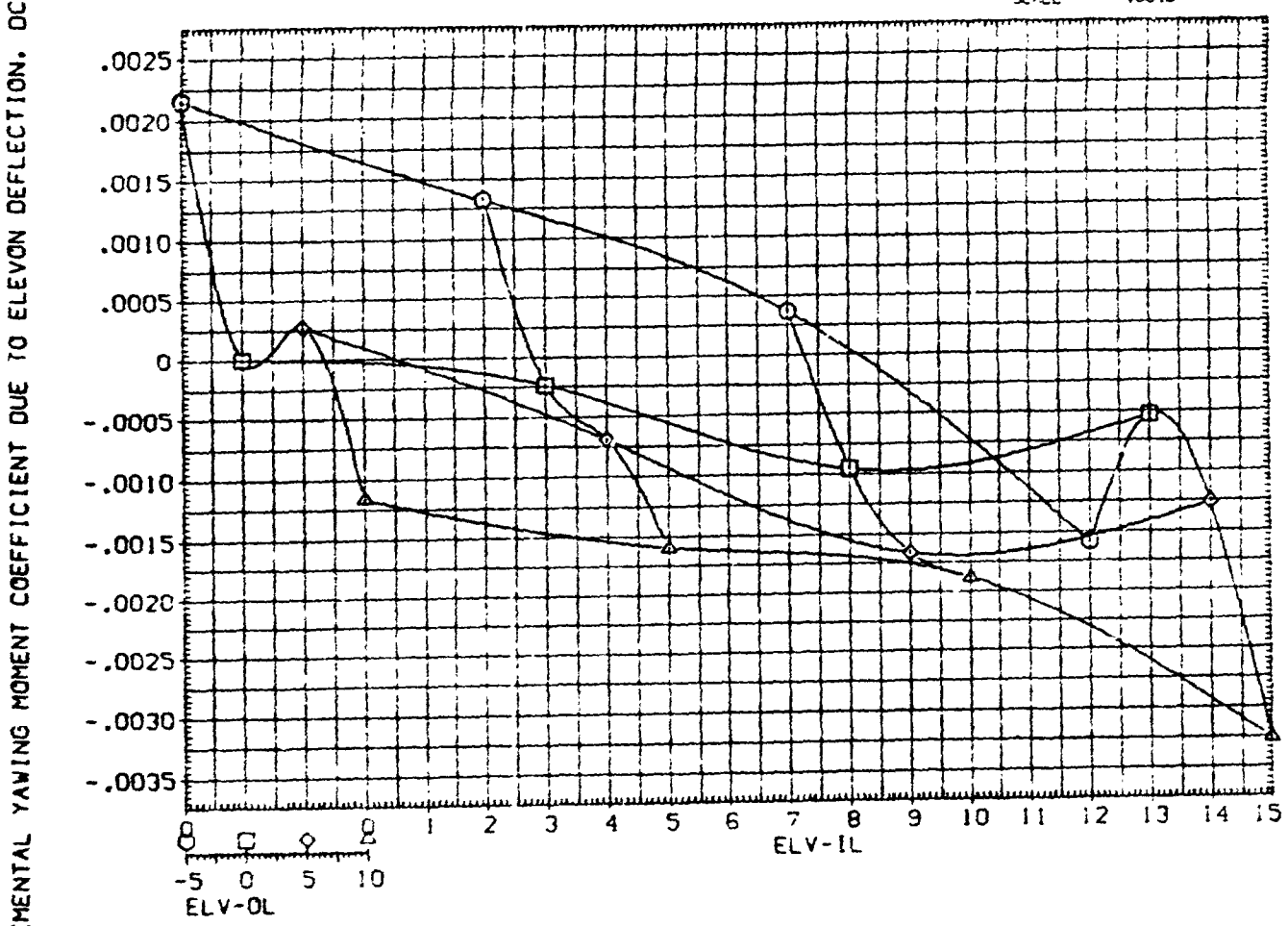
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-4.0 (BINGSD)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	[illegible]	INCHES
BREF	[illegible]	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

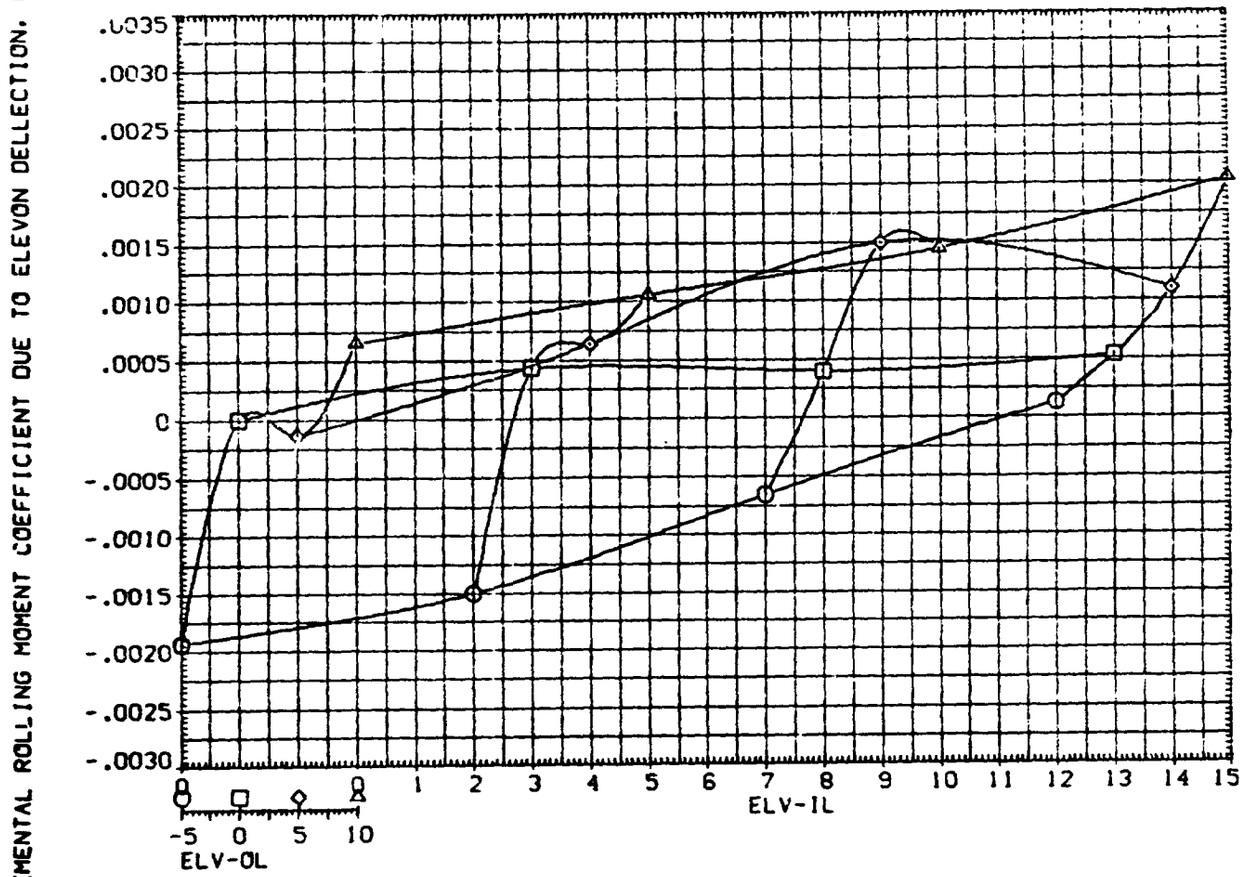
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-4.0 (BINGSO)

PARAMETRIC VALUES

BETA	.000	ALPHA	-4.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. X*
YMRP	.0000	IN. Y*
ZMRP	400.0000	IN. Z*
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

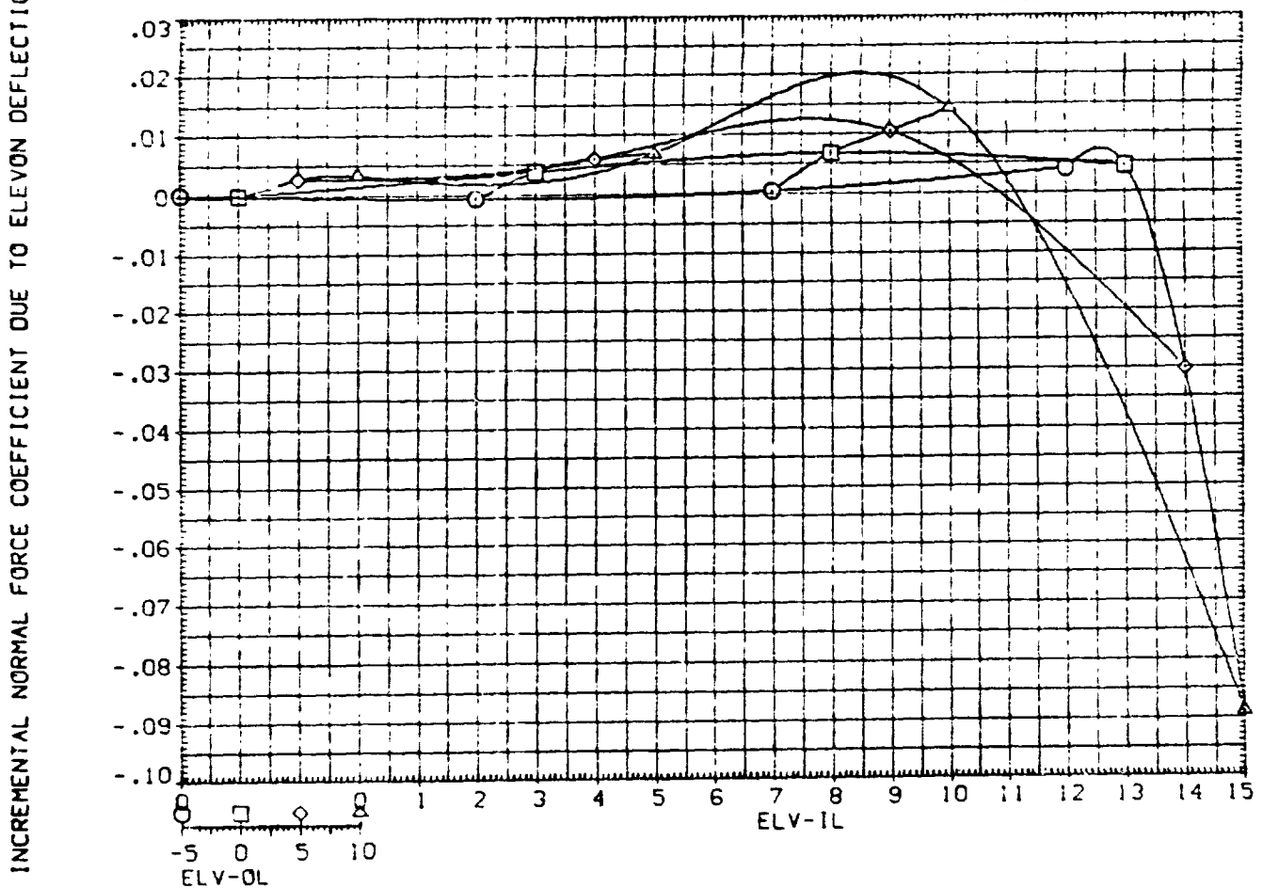
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-2.0 (BINGSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
BREF	[illegible]	INCHES
CREF	[illegible]	INCHES
XMRP	[illegible]	FT
YMRP	[illegible]	FT
ZMRP	400.0000	FT. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

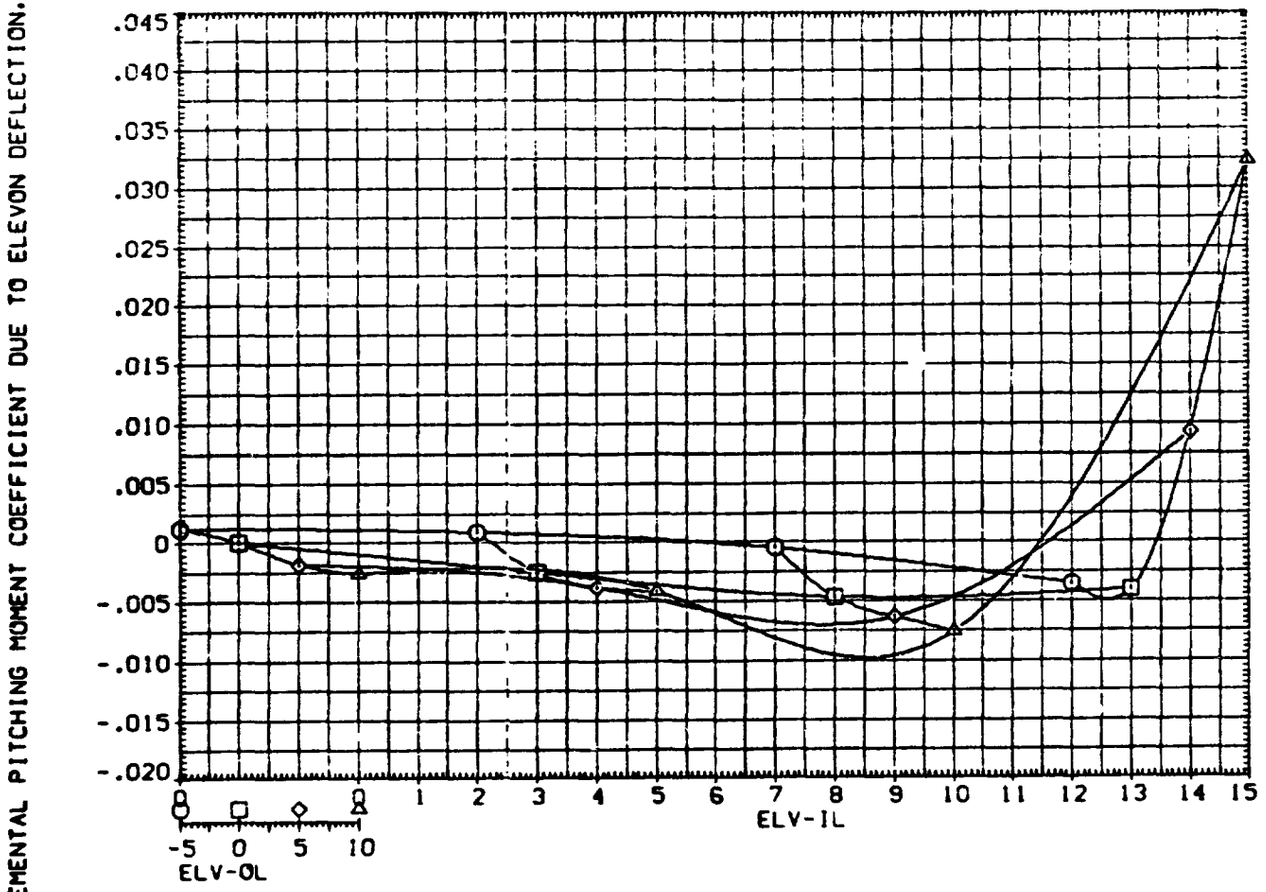
MSFC TWT 622 (IA125) 74 OTS, M=2.74, ALPHA=-2.0 (BINGSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	[illegible]	INCHES
BREF	[illegible]	INCHES
XMRP	975.0000	IN. X
YMRP	.0000	IN. Y
ZMRP	400.0000	IN. Z
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

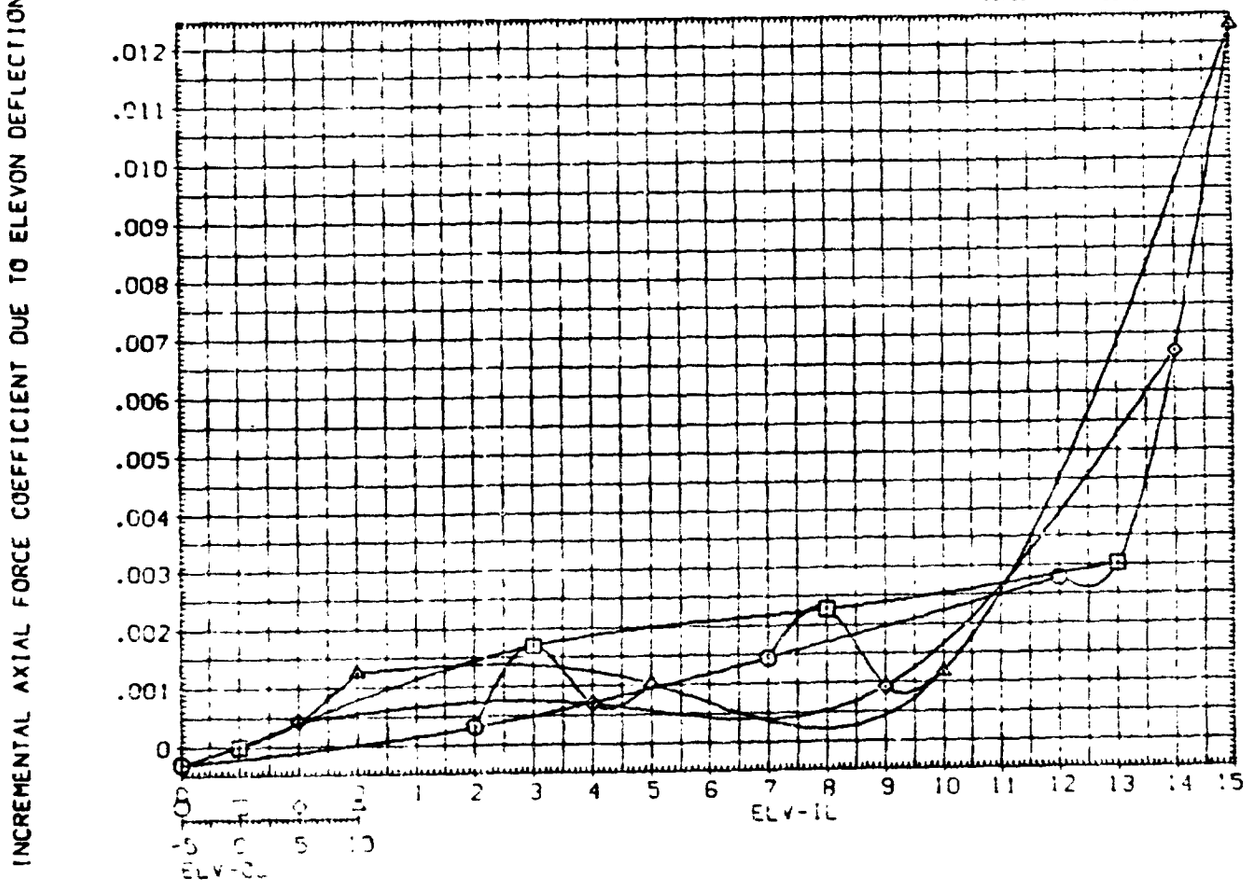
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-2.0 (BINGSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	2.740	ELV-IB	.000
ELV-OB	.000		

REFERENCE INFORMATION

SREF	2610.0000	SQ. FT
LREF	1200.0000	INCHES
BREF	1200.0000	INCHES
XMOM	1976.0000	IN. FT
YMOM	[illegible]	IN. FT
ZMOM	400.0000	IN. FT
SCALE	.0040	

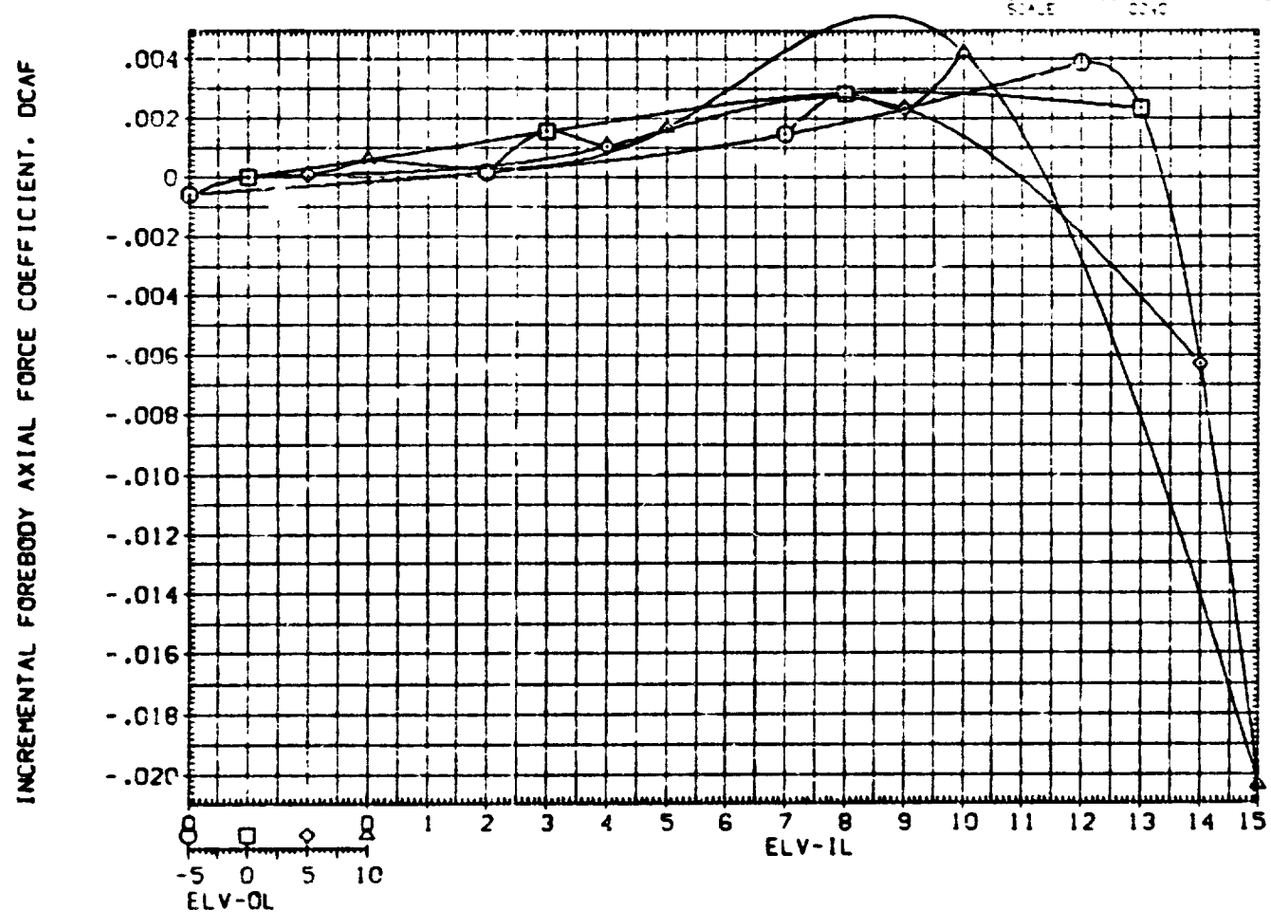


ELEVON EFFECTIVENESS FOR MACH = 2.74

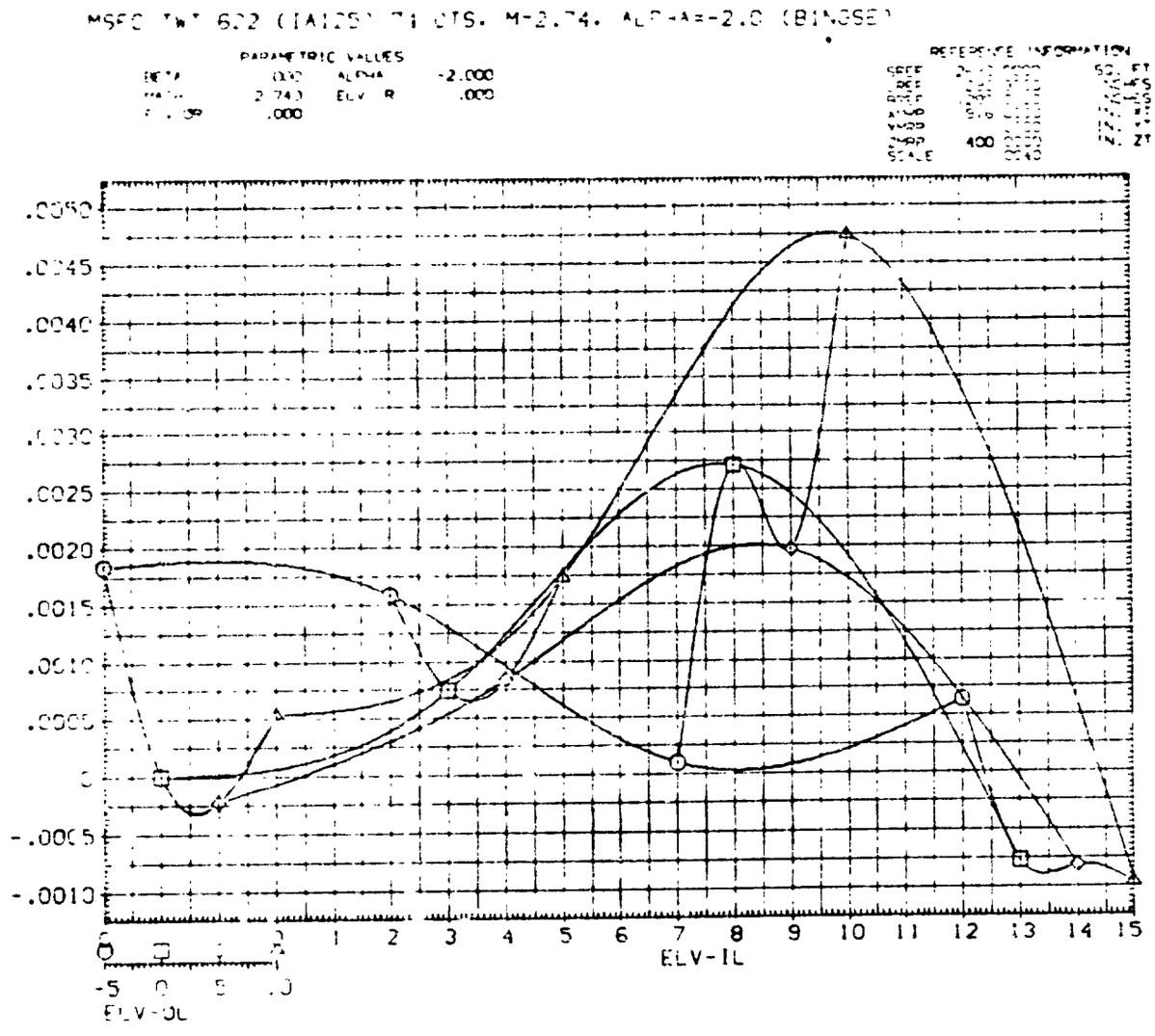
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-2.0 (BINGSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

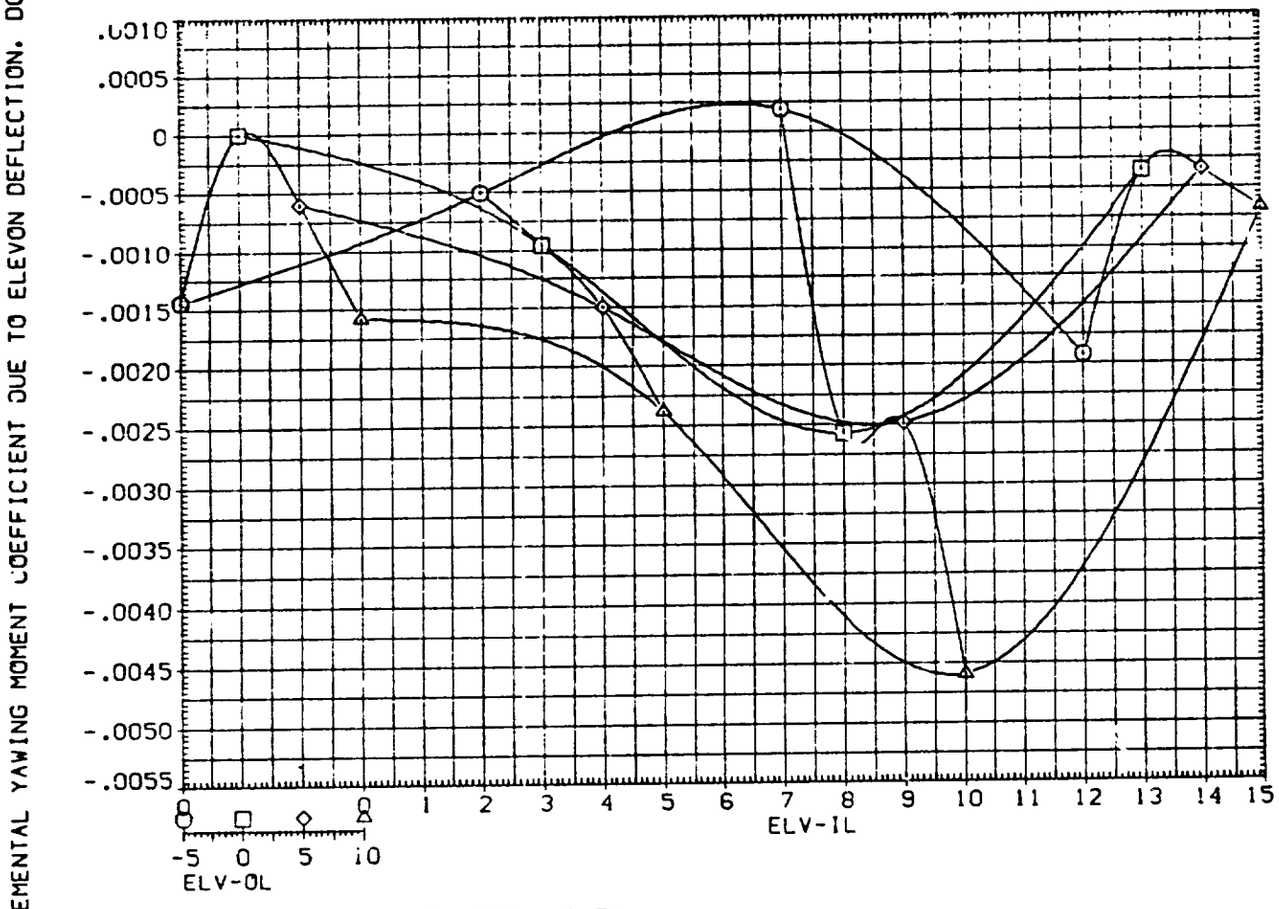
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=-2.0 (BINGSE)

PARAMETRIC VALUES

BETA	.000	ALPHA	-2.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2600.0000	SQ. FT
LREF	[illegible]	[illegible]
BREF	[illegible]	[illegible]
XMRP	975.0000	[illegible]
YMRP	[illegible]	[illegible]
ZMRP	400.0000	[illegible]
SCALE	[illegible]	



ELEVON EFFECTIVENESS FOR MACH = 2.74

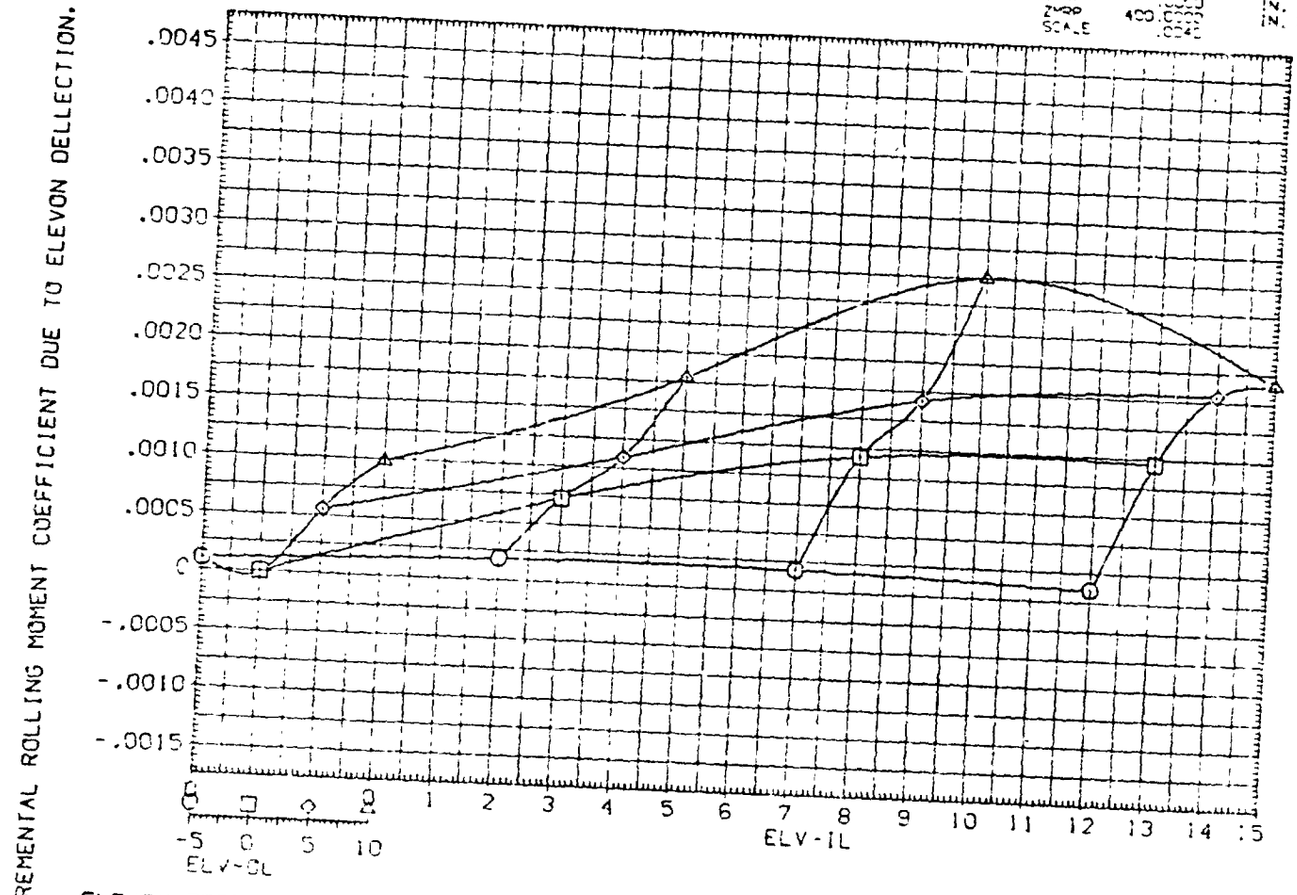
MSFC TWT 622 (IA125) 74 OTS. M=2.74, ALPHA=-2.0 (BINGSE)

PARAMETRIC VALUES

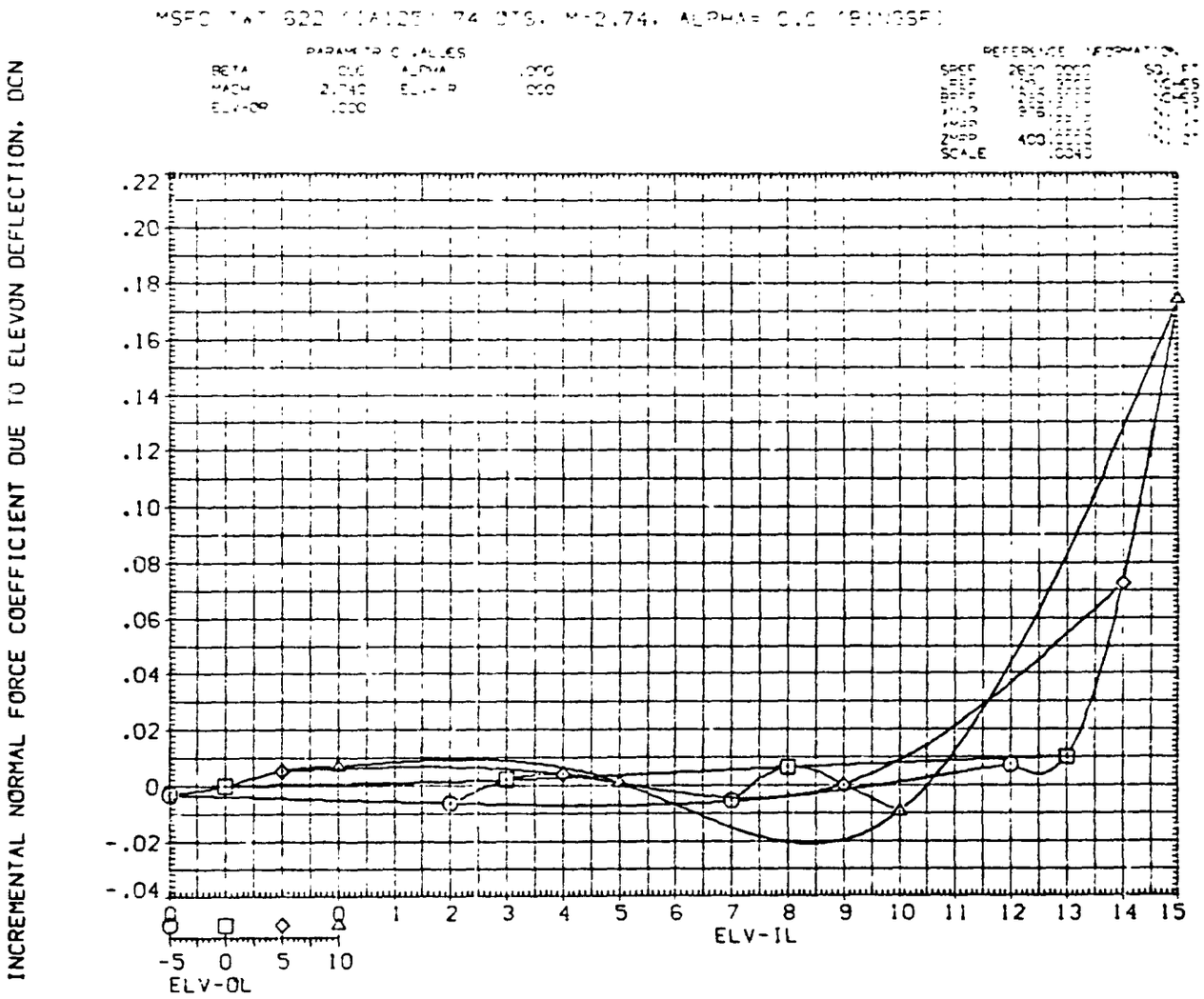
BETA	.000	ALPHA	-2.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

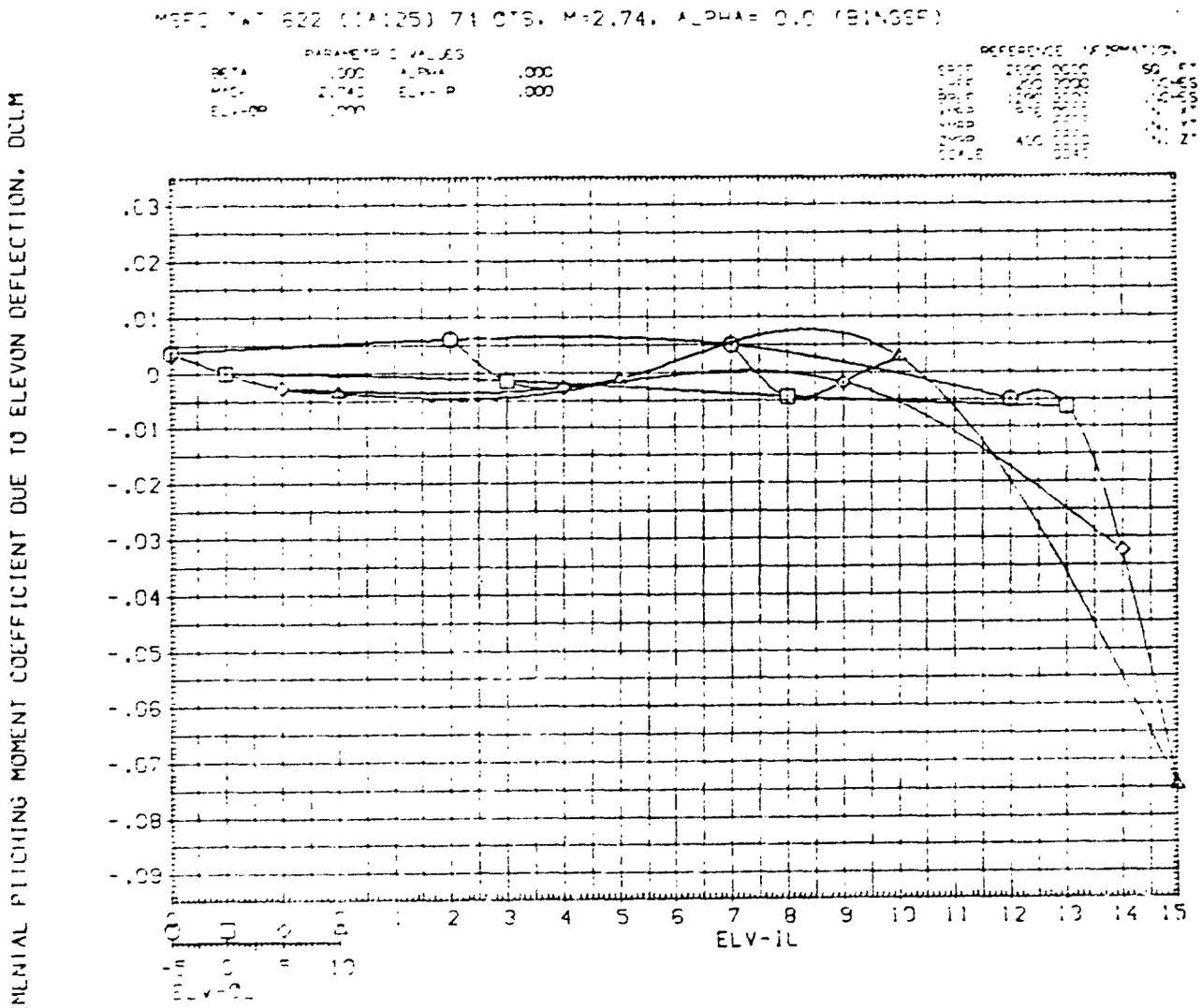
SREF	2690.0000	SQ. FT
CREF	[illegible]	[illegible]
BREF	[illegible]	[illegible]
XMRP	[illegible]	[illegible]
YMRP	[illegible]	[illegible]
ZMRP	400.0000	[illegible]
SCALE	[illegible]	[illegible]



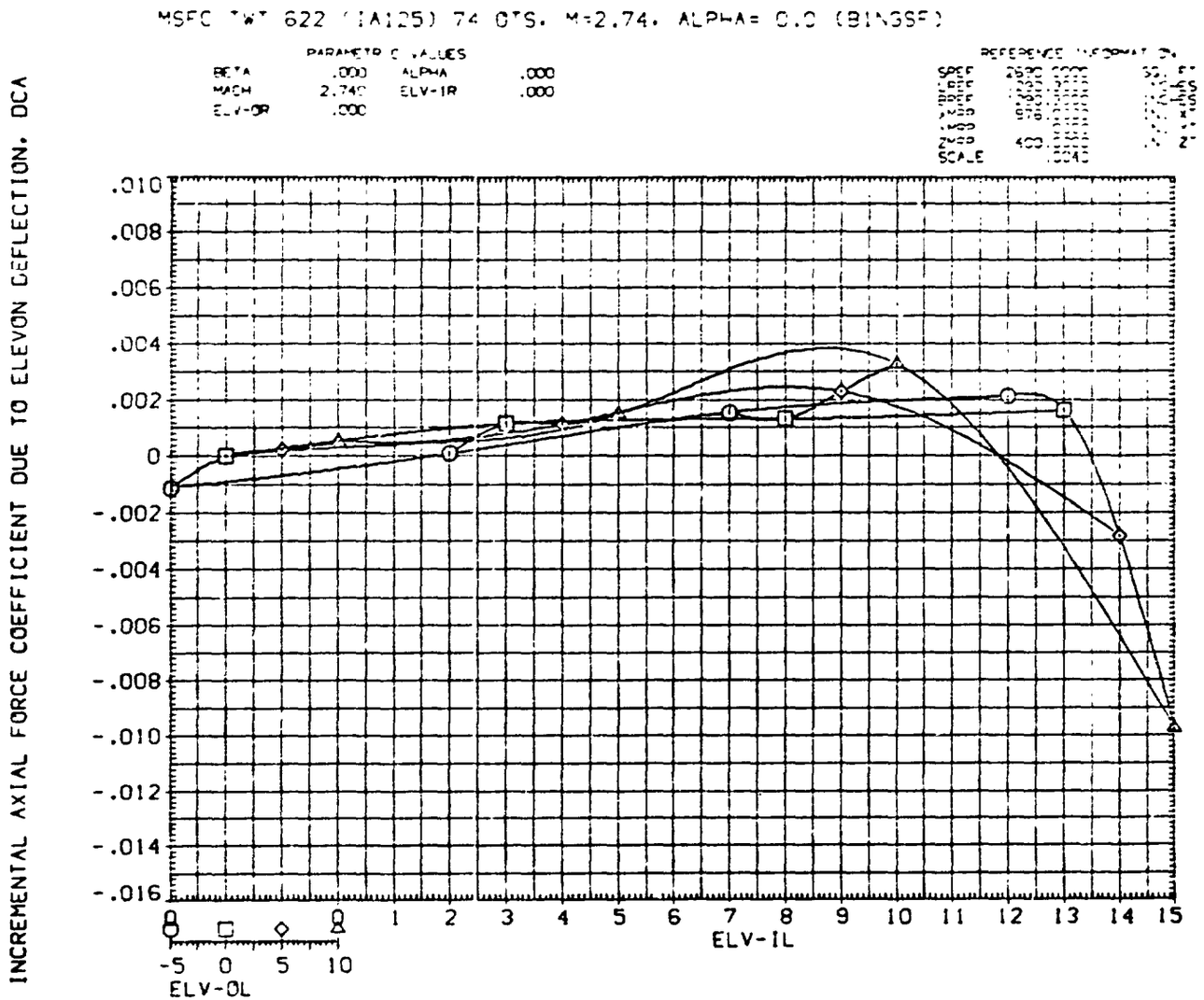
ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

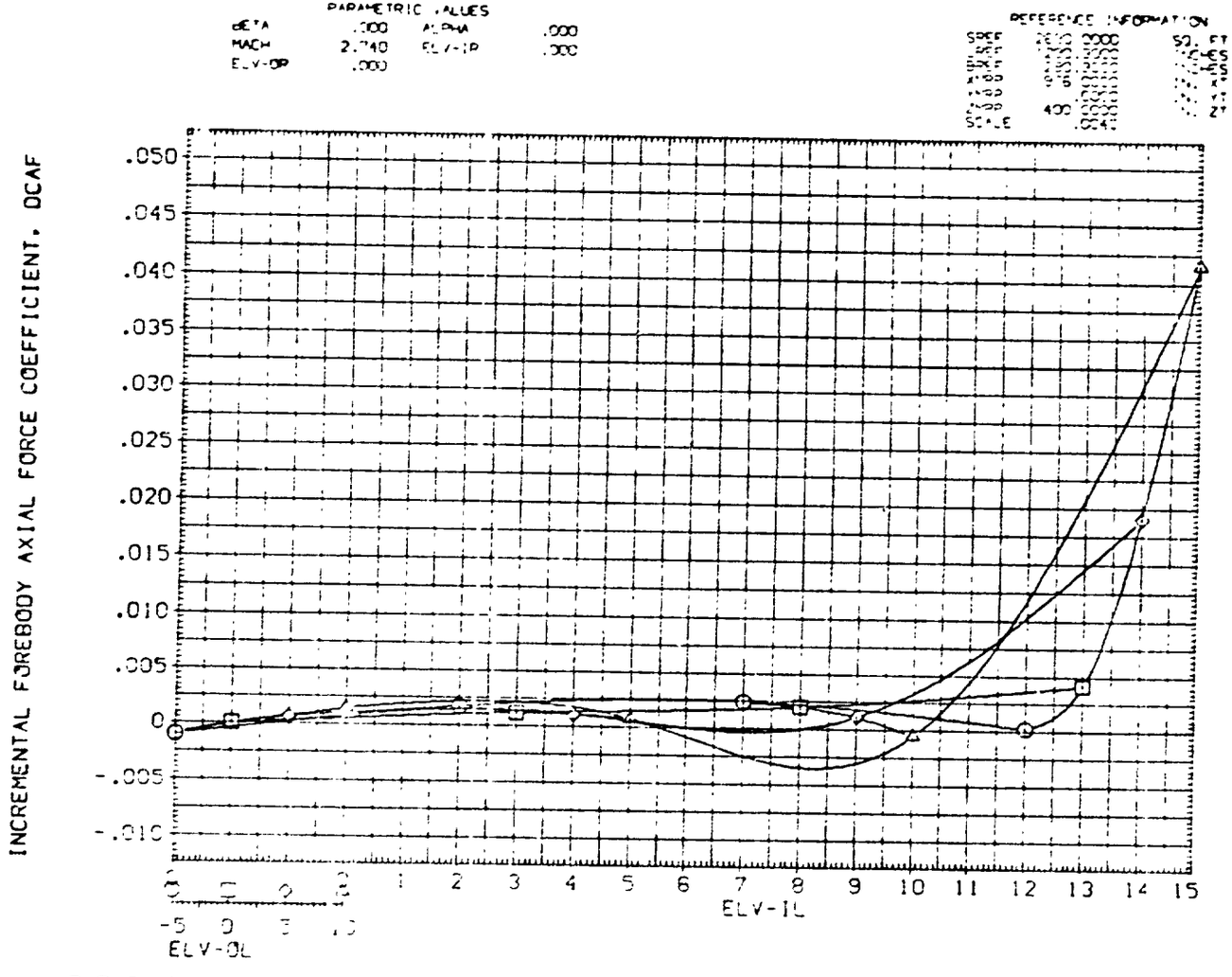


ELEVON EFFECTIVENESS FOR MACH = 2.74

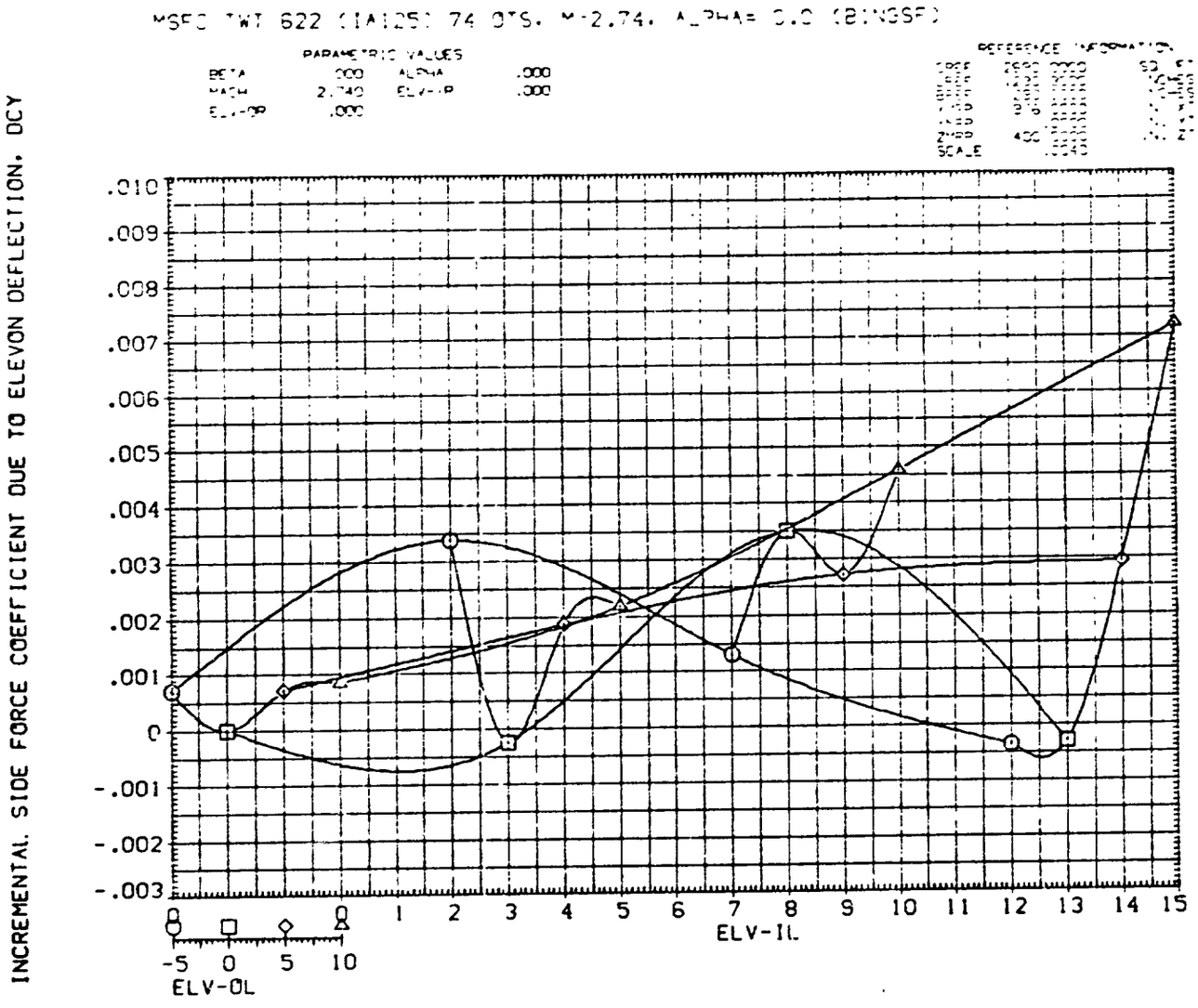


ELEVON EFFECTIVENESS FOR MACH = 2.74

MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA= 0.0 (BINGSF)



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

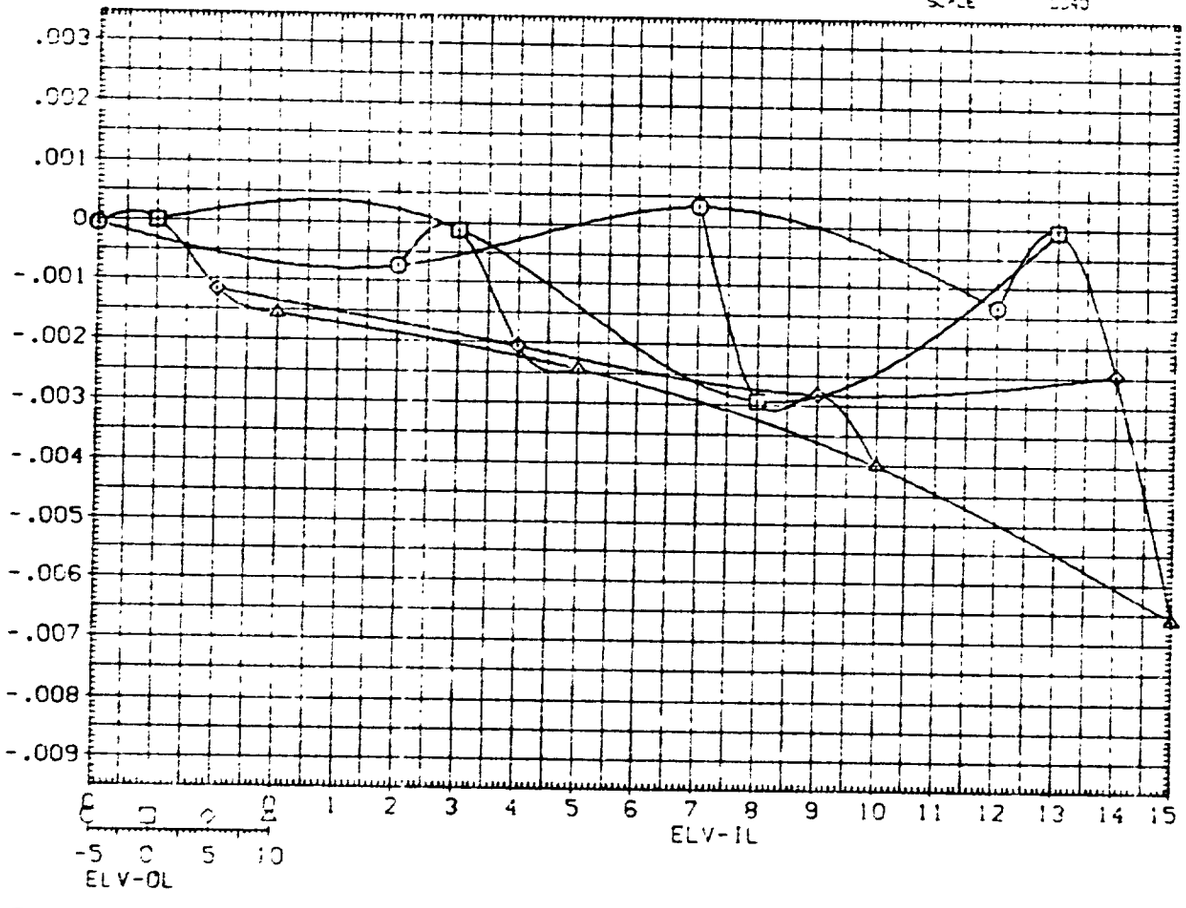
MSFC TWT 622 (IA:25) 74 OTS. M=2.74. ALPHA= 0.0 (BINGSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	[illegible]	SQ. FT
LREF	[illegible]	[illegible]
BREF	[illegible]	[illegible]
XMRP	976	[illegible]
YMRP	[illegible]	[illegible]
ZMRP	400	[illegible]
SCALE	[illegible]	



ELEVON EFFECTIVENESS FOR MACH = 2.74

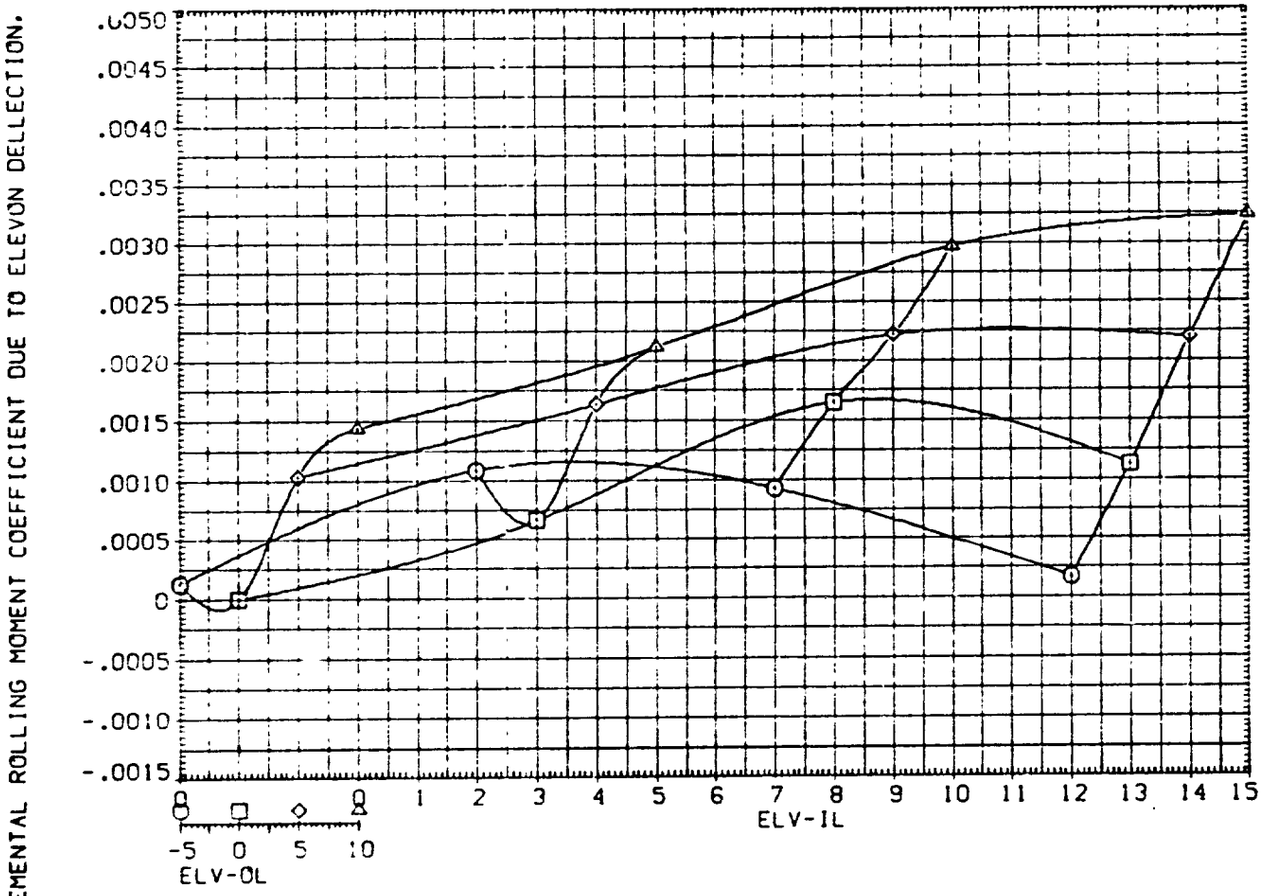
MSFC TWT 622 (IA125) 74 DTS. M=2.74. ALPHA= 0.0 (BINGSF)

PARAMETRIC VALUES

BETA	.000	ALPHA	.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

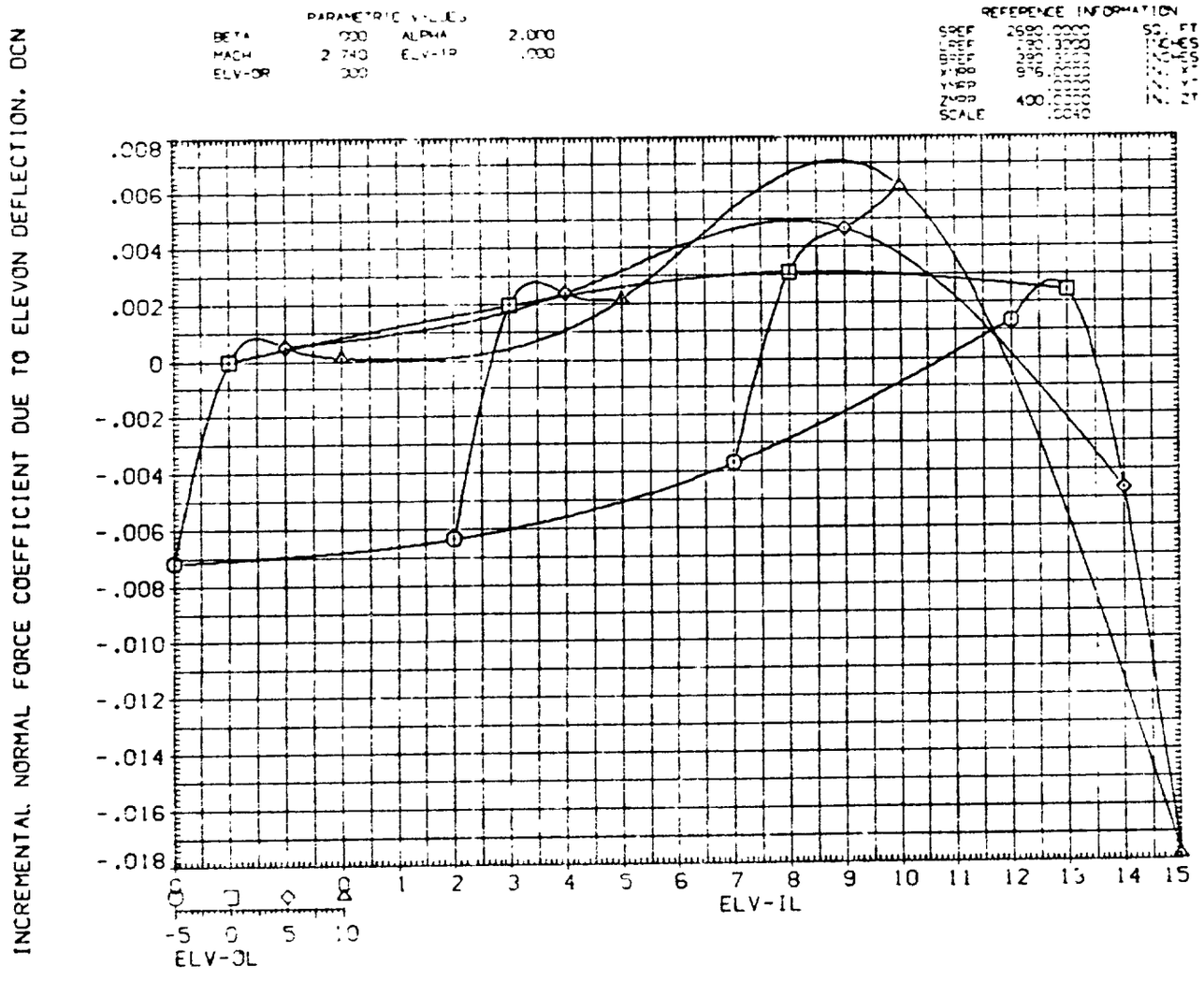
REFERENCE INFORMATION

SREF	2600.0000	SQ. FT
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	420 [illegible]	[illegible] FT
SCALE	[illegible]	

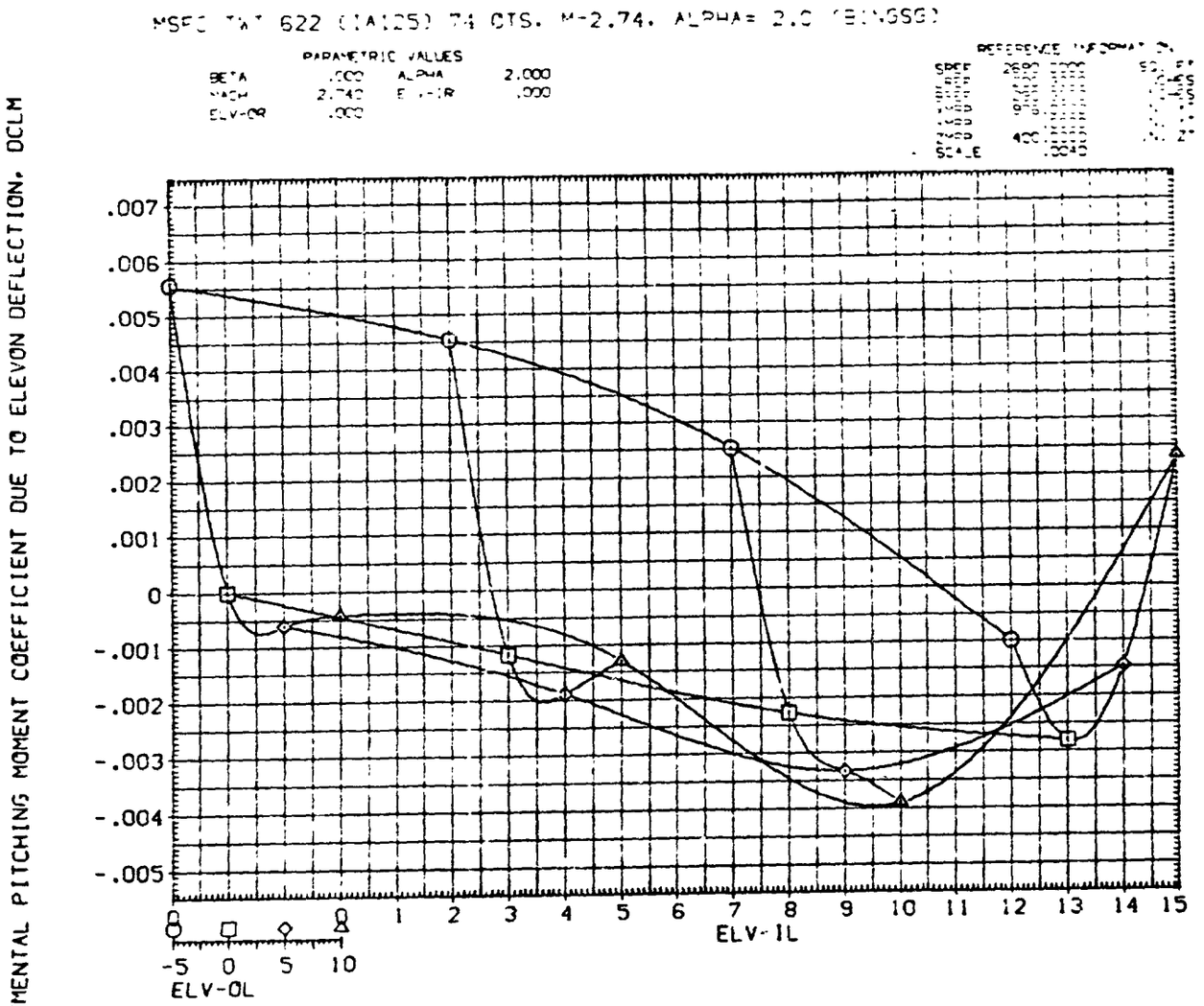


ELEVON EFFECTIVENESS FOR MACH = 2.74

MSFC TWT 622 (IA125) 74 DTS. M 2.74, ALPHA= 2.0 (BINGSG)



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

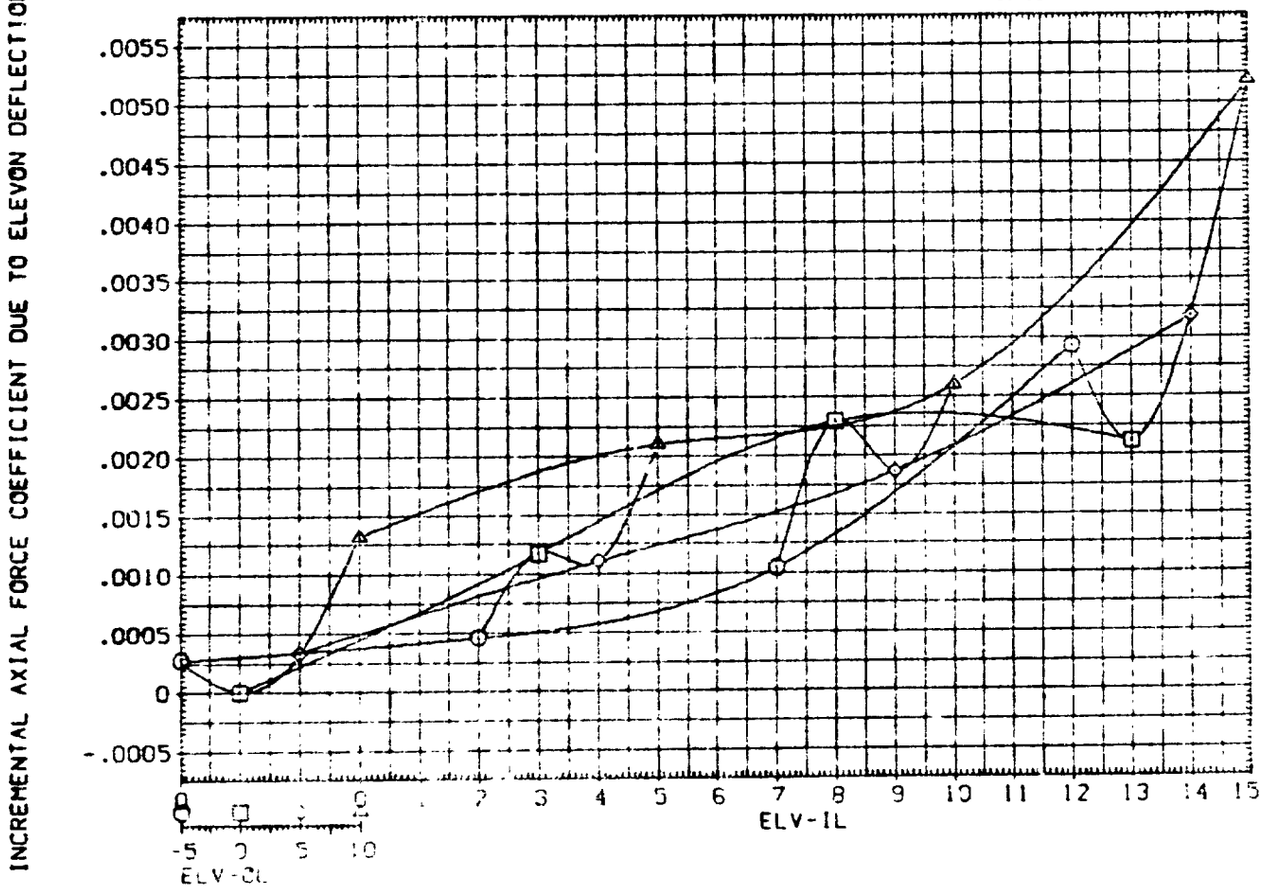
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA= 2.0 (BINGSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1293.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

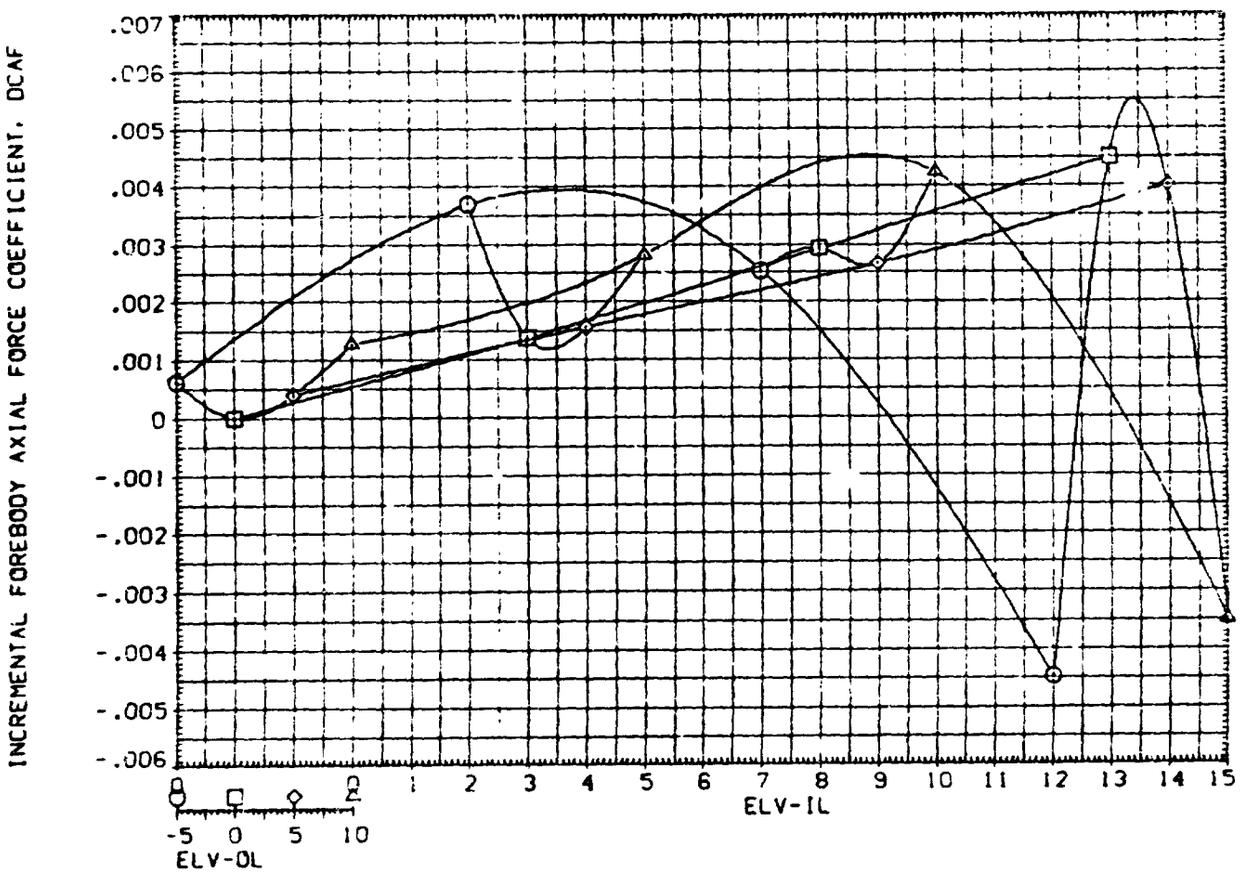
MSFC TWT 622 (1A125) 74 DTS. M=2.74. ALPHA= 2.0 (BINGSG)

PARAMETRIC VALUES

BETA	.000	ALPHA	2.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
BREF	1.97.3000	INCHES
CREF	1.30.3000	INCHES
XMRP	376.0000	IN. X
YMRP	.0000	IN. Y
ZMRP	400.0000	IN. Z
SCALE	.0047	



ELEVON EFFECTIVENESS FOR MACH = 2.74

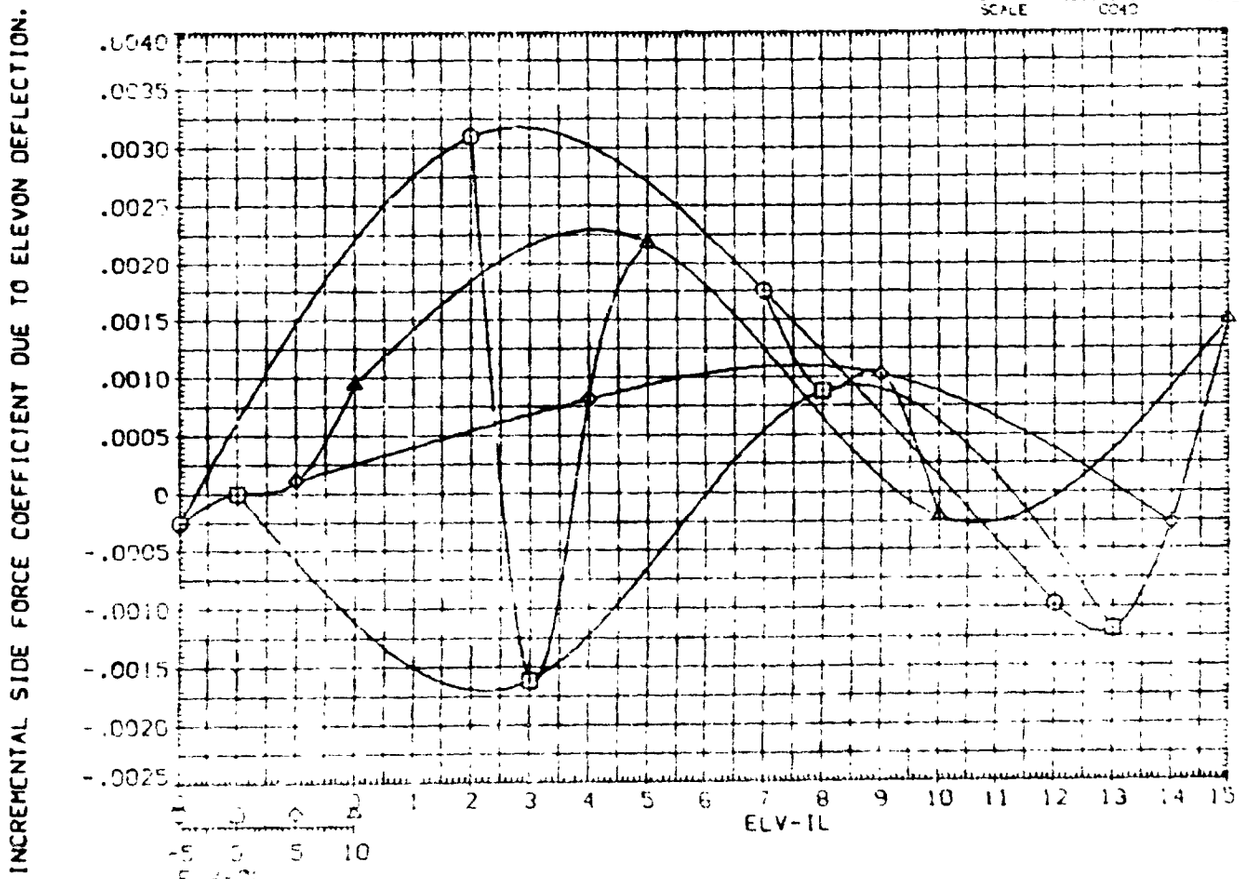
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA= 2.0 (BINGSG)

PARAMETRIC VALUES

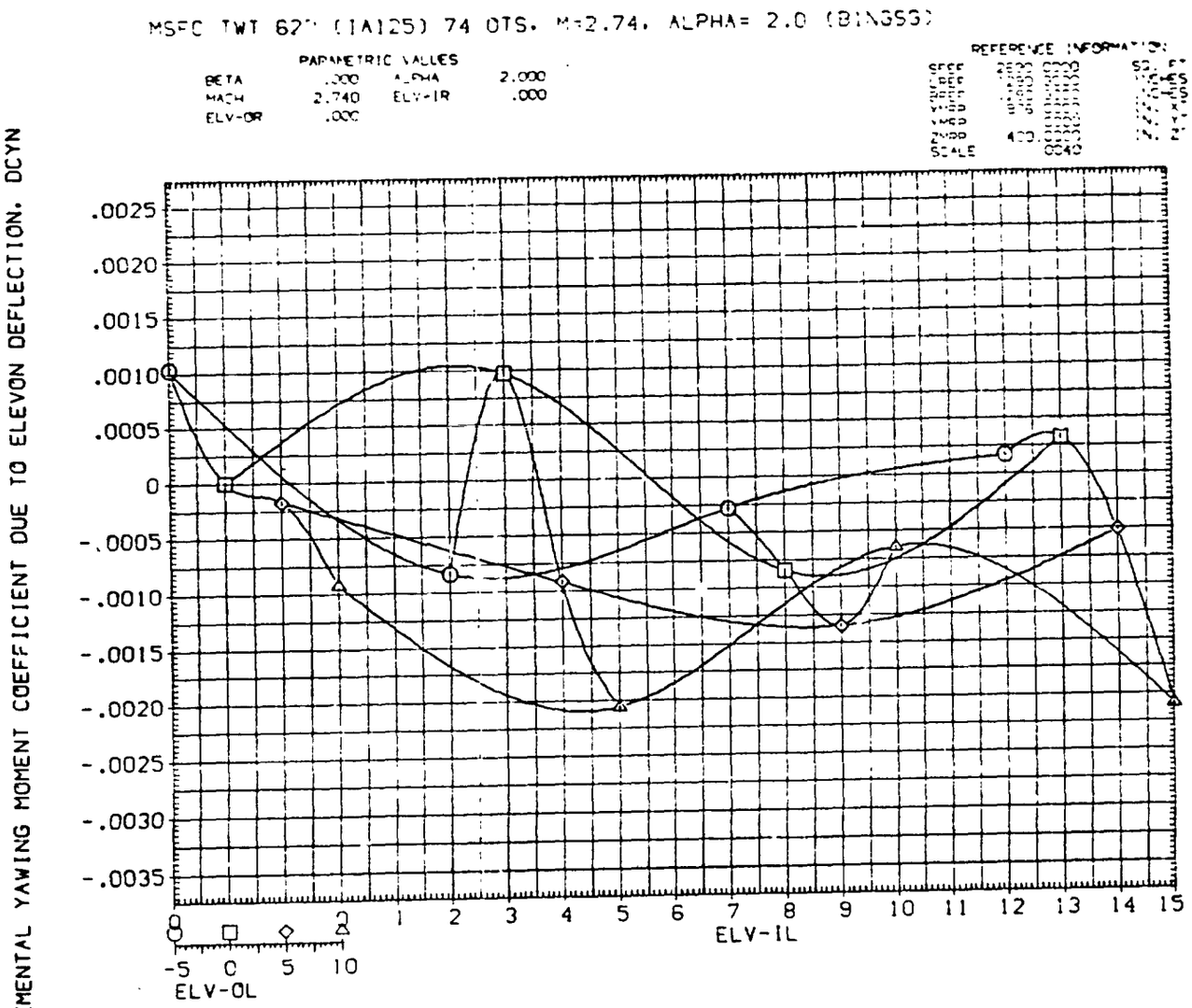
BETA	.000	ALPHA	2.000
MACH	2.740	ELV-IR	.000
ELV OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1200.0000	INCHES
BREF	1200.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

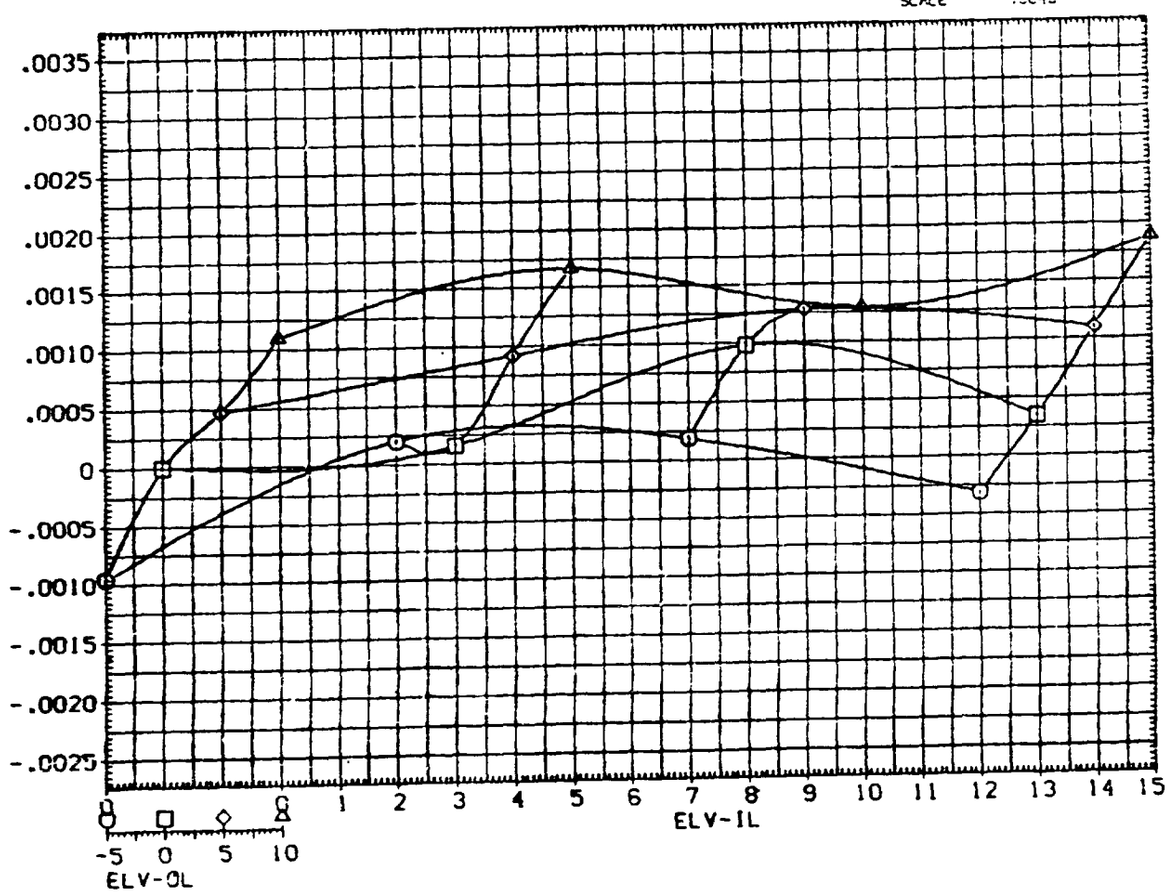
MSFC TWT 622 (IA125) 74 OTS. M=2.74, ALPHA= 2.0 (BINGSG)

PARAMETRIC VALUES

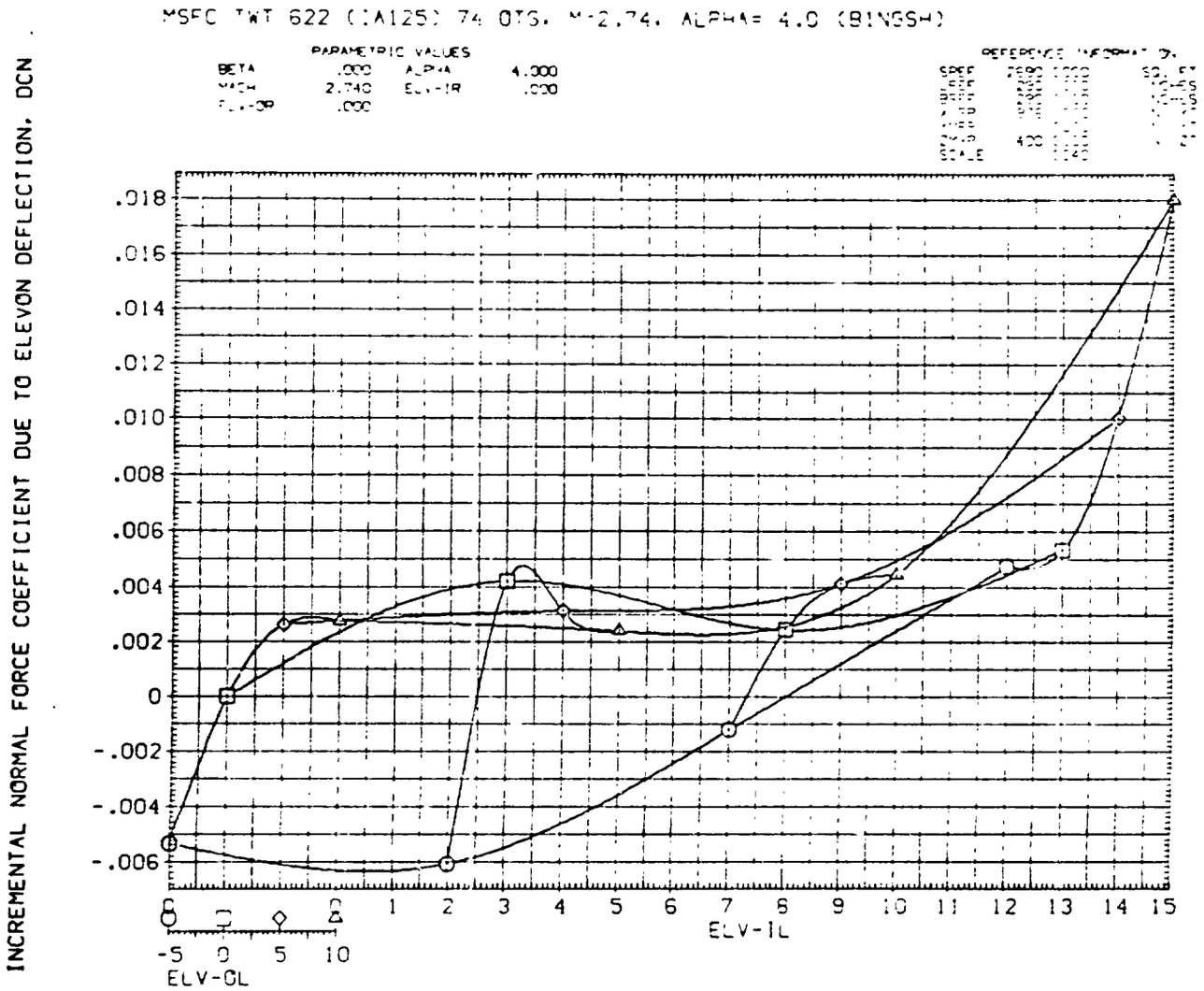
BETA	.000	ALPHA	2.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

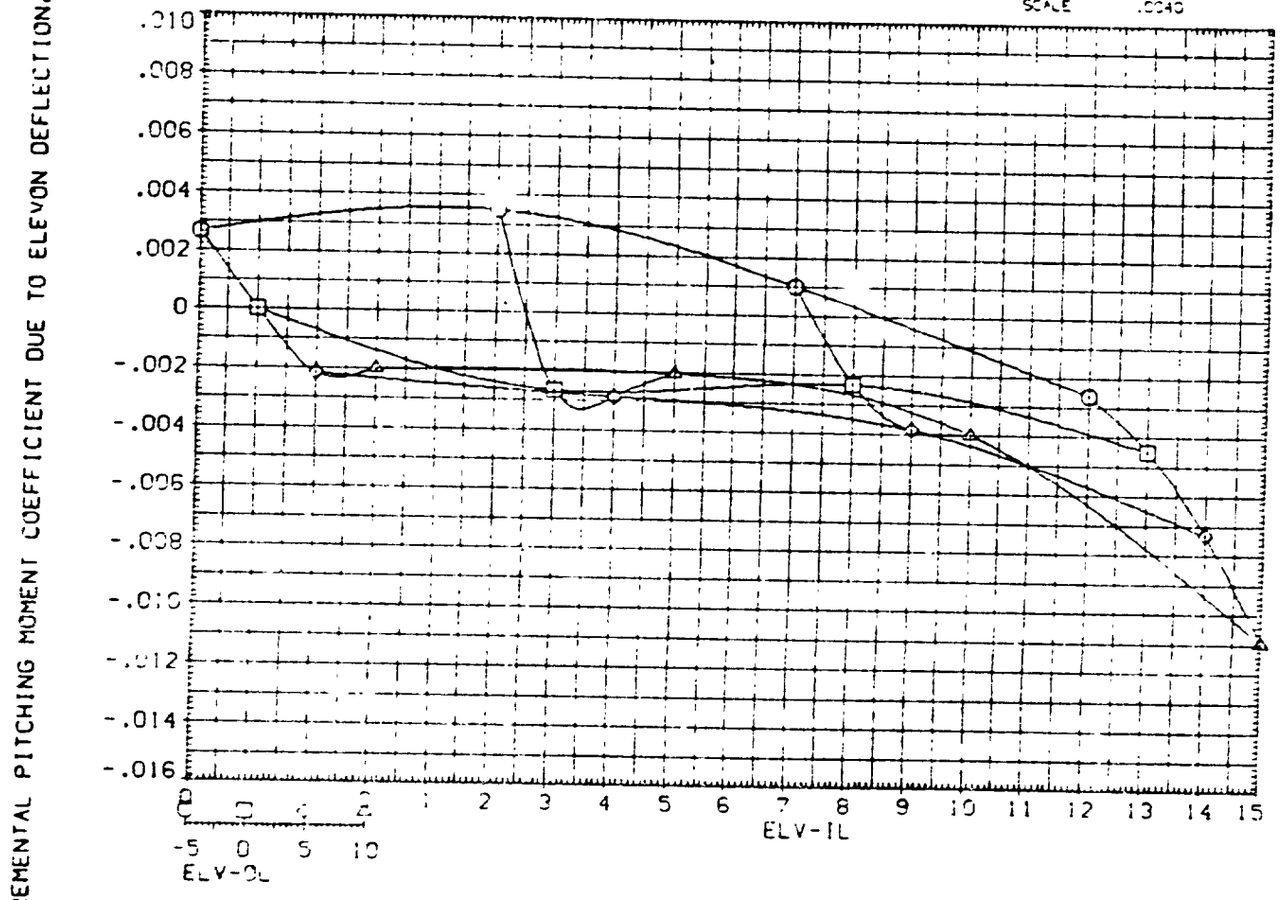
MSFC TWT 622 (IA125) 74 OTS. M=2.74, ALPHA= 4.0 (BINGSH)

PARAMETRIC VALUES

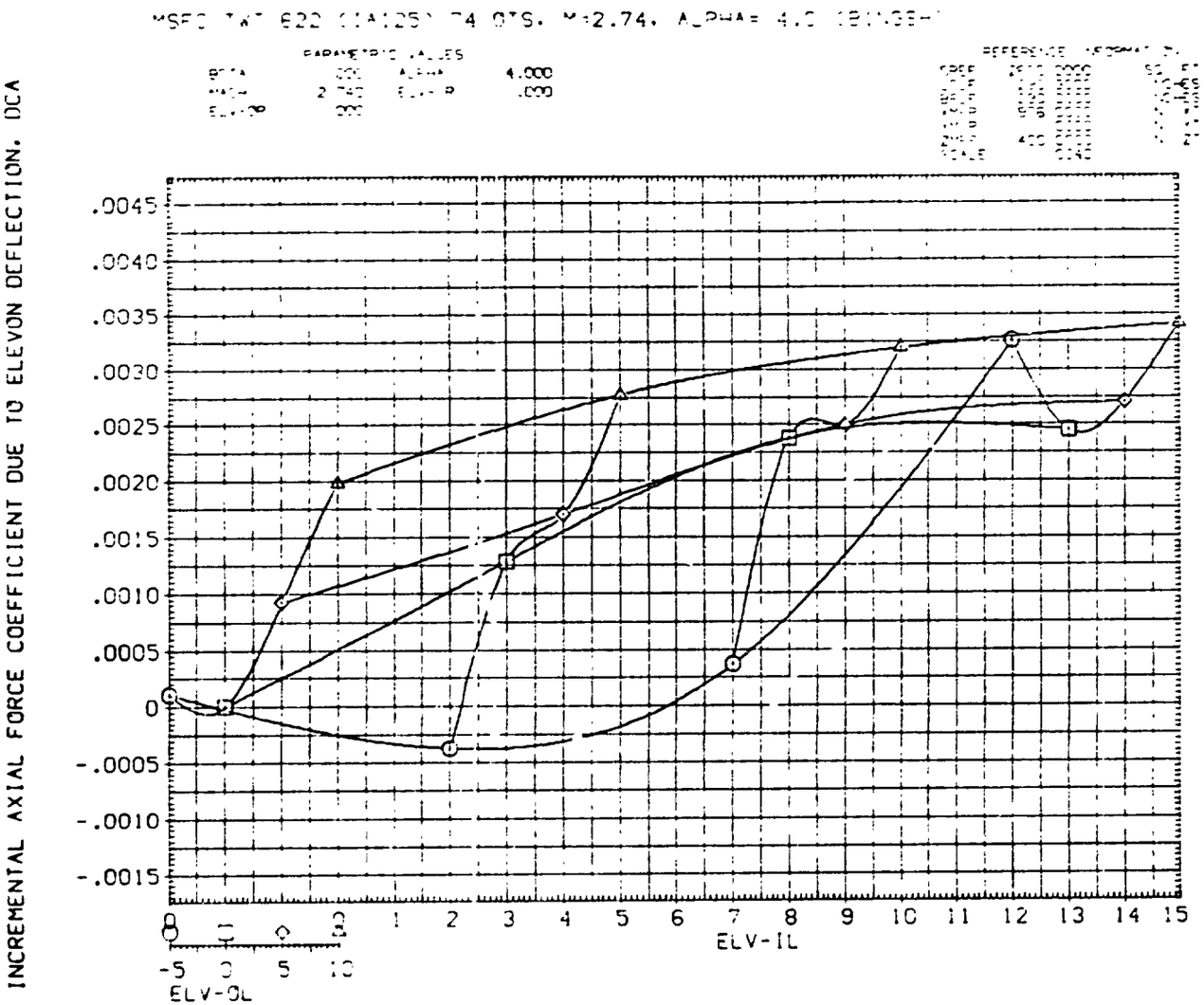
BETA	.000	ALPHA	4.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

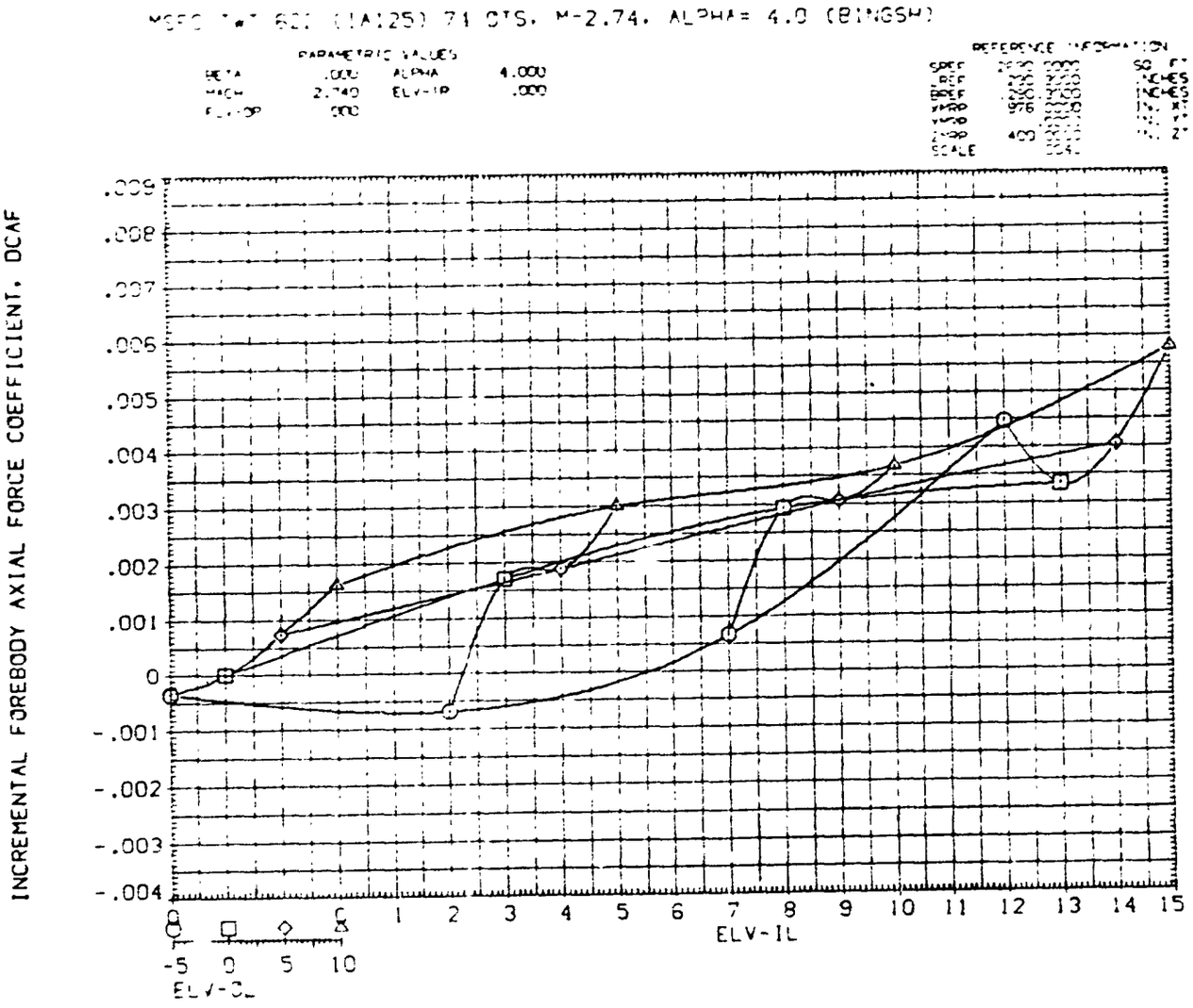
SREF	2695.0000	SQ. FT
LREF	[illegible]	INCHES
BREF	[illegible]	INCHES
XMOM	[illegible]	IN. XT
YMOM	[illegible]	IN. YT
ZMOM	400.[illegible]	IN. ZT
SCALE	.0040	



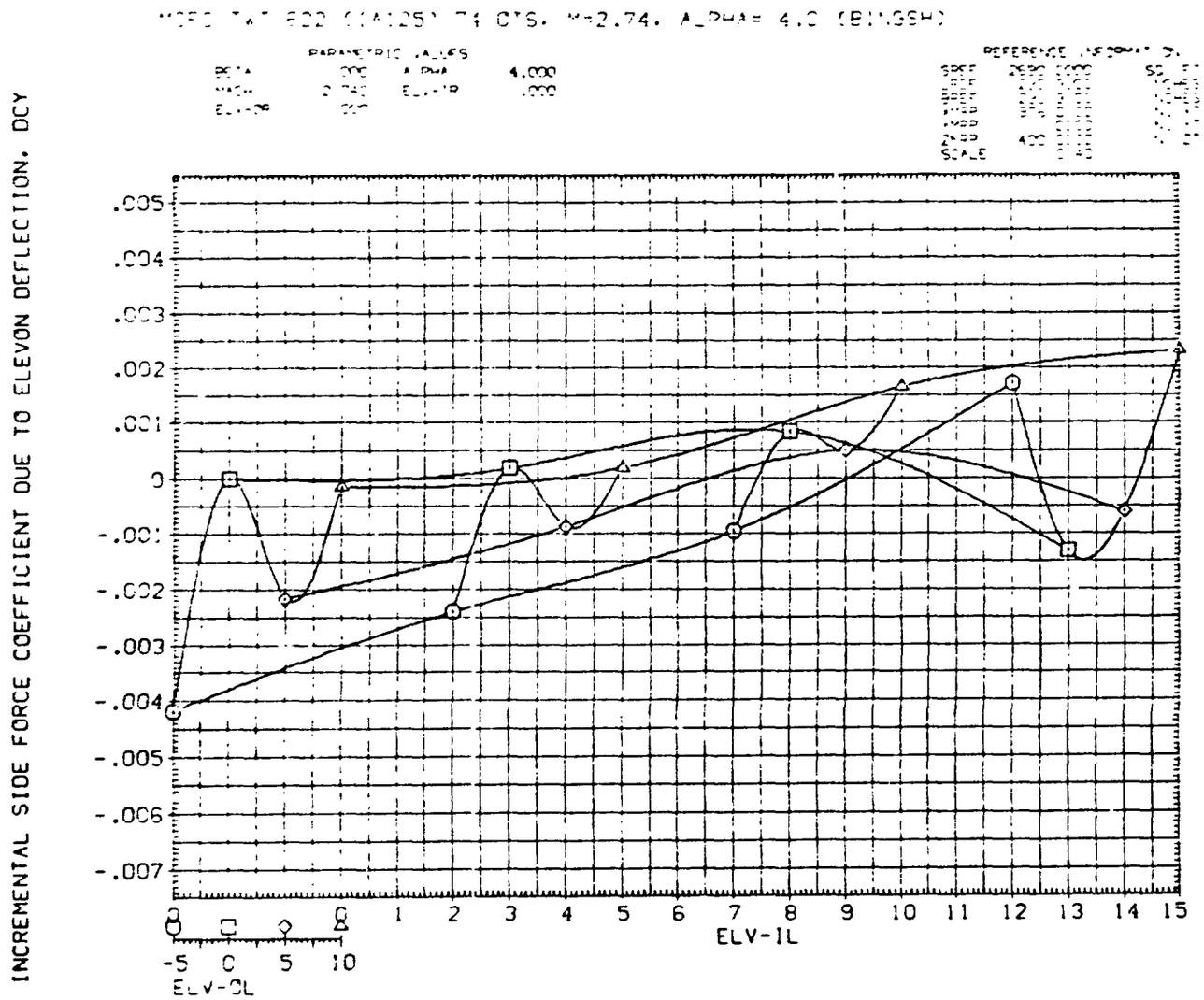
ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

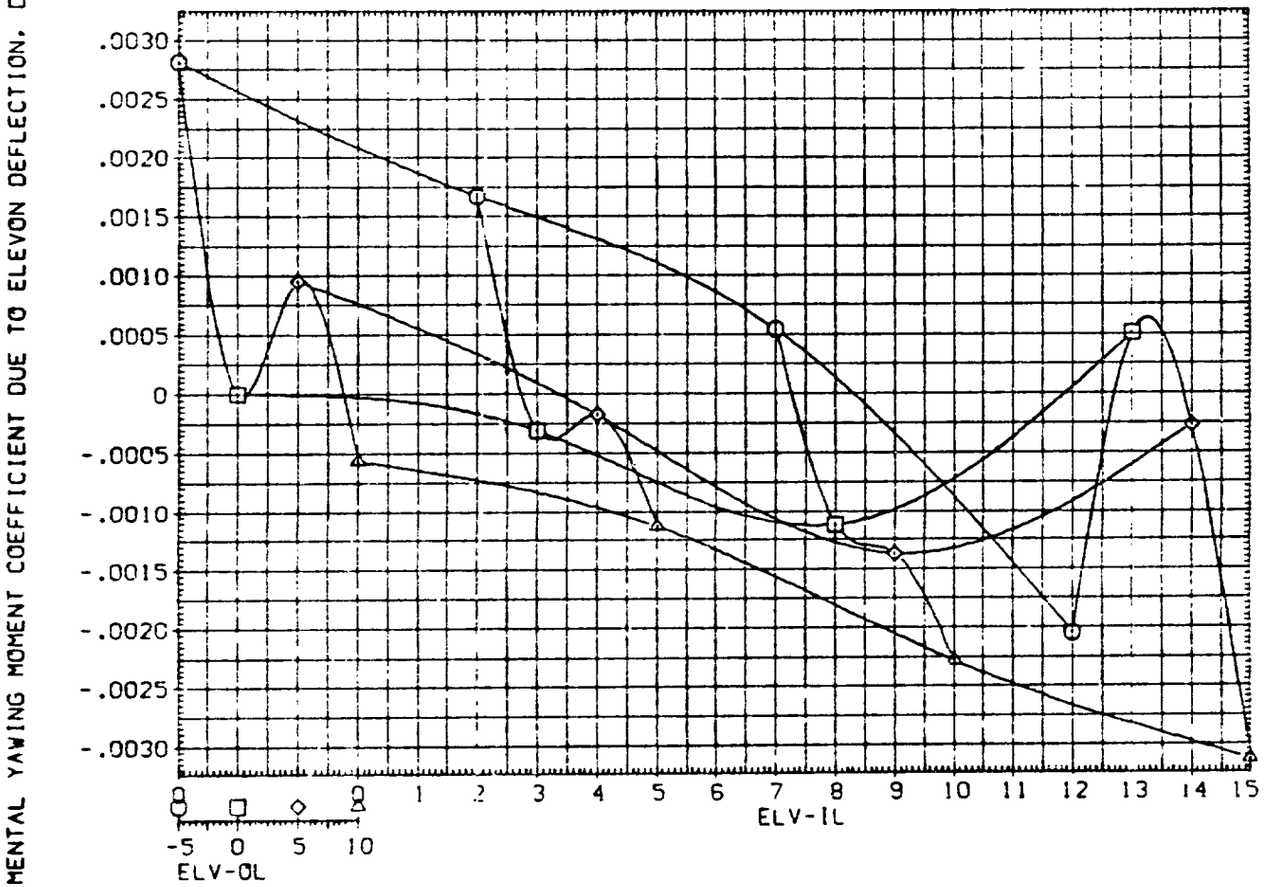
MSFC TWT 622 (IA125) 74 OTS. M-2.74. ALPHA= 4.0 (BINGSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

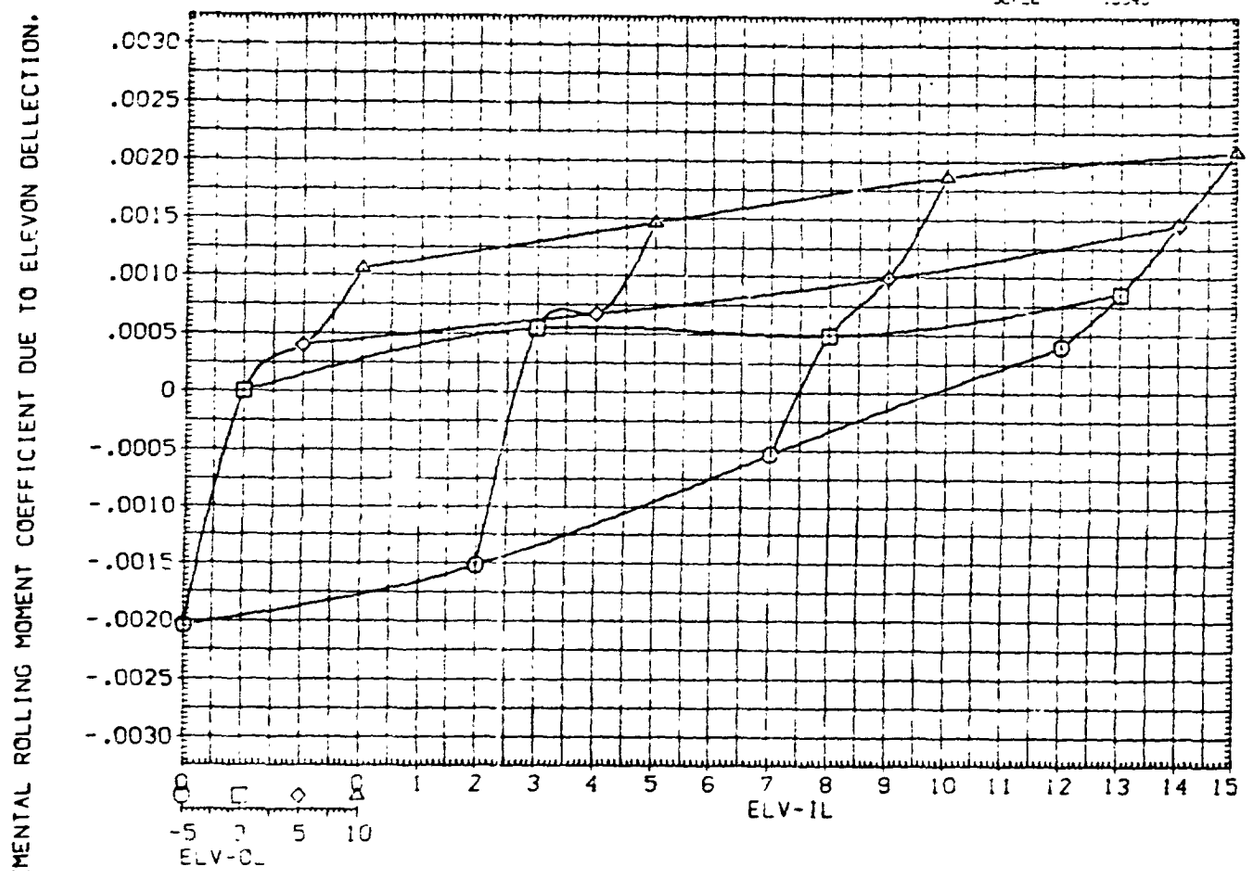
MSFC TWT 622 (1A125) 71 OTS. M=2.74, ALPHA= 4.0 (BINGSH)

PARAMETRIC VALUES

BETA	.000	ALPHA	4.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

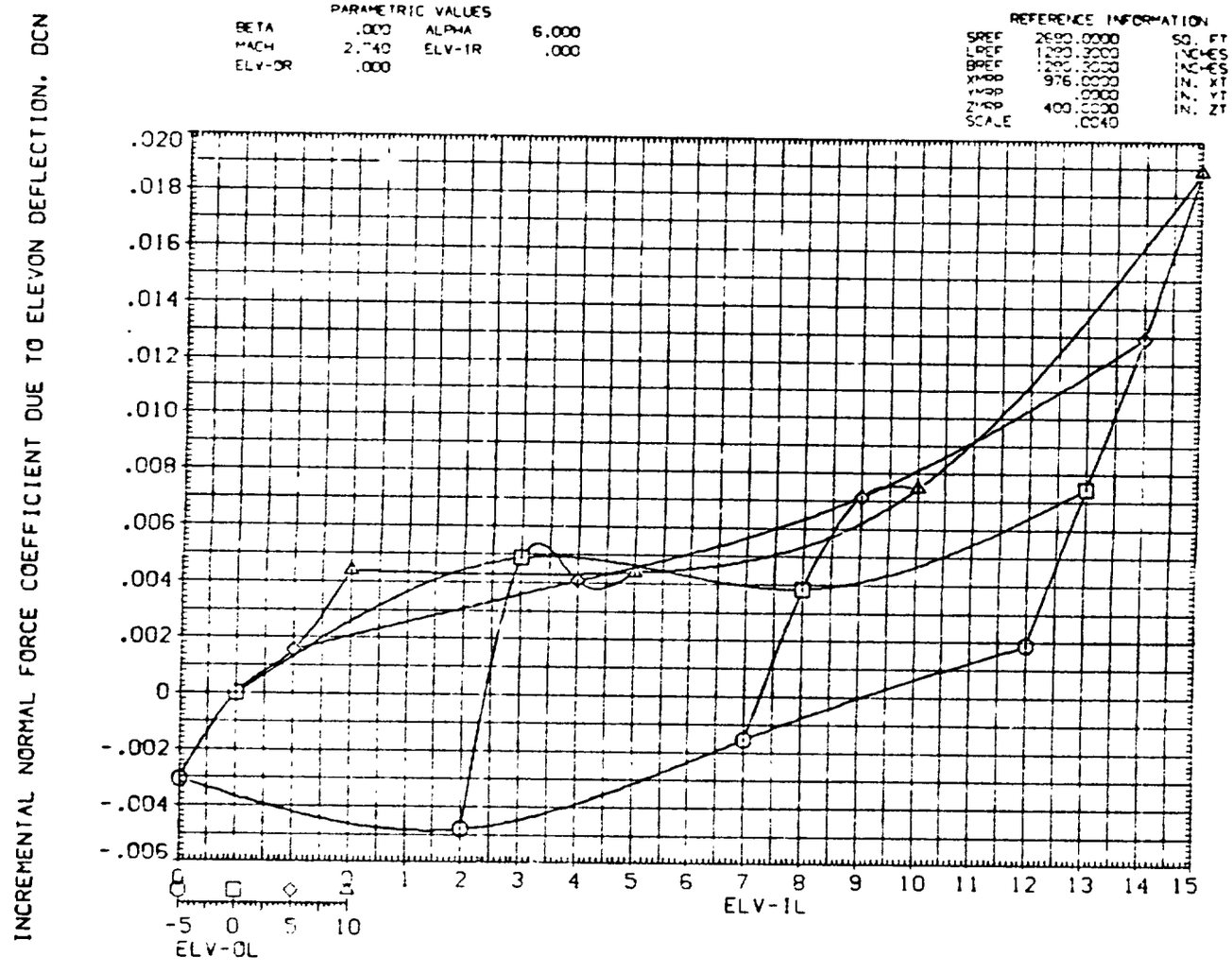
REFERENCE INFORMATION

SREF	2590.0000	SQ. FT
LREF	1296.3000	INCHES
BREF	1296.3000	INCHES
XMRP	876.0000	IN. FT
YMRP	.0000	IN. FT
ZMRP	400.0000	IN. ZT
SCALE	.0040	

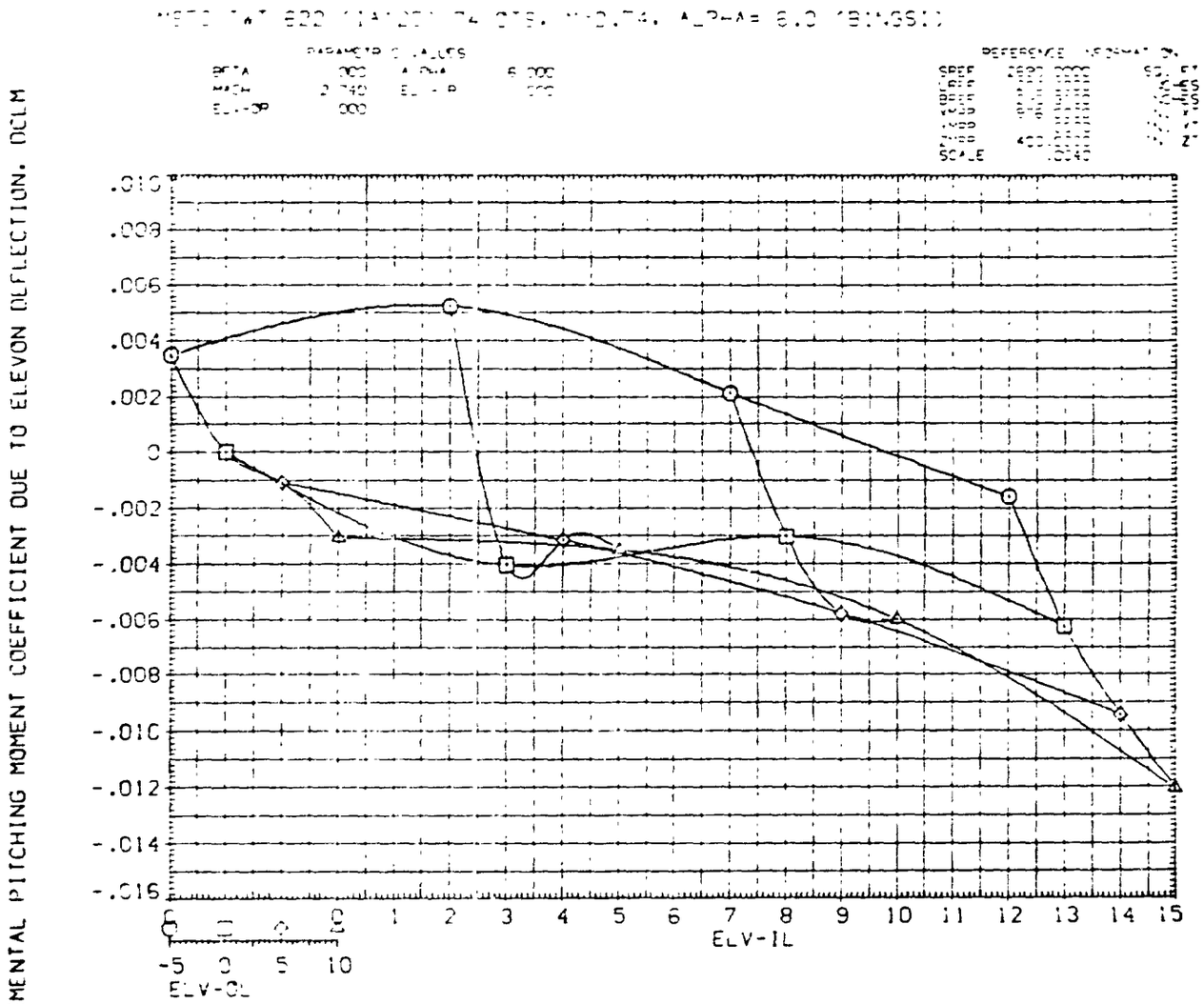


ELEVON EFFECTIVENESS FOR MACH = 2.74

MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA= 6.0 (BINGSI)



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

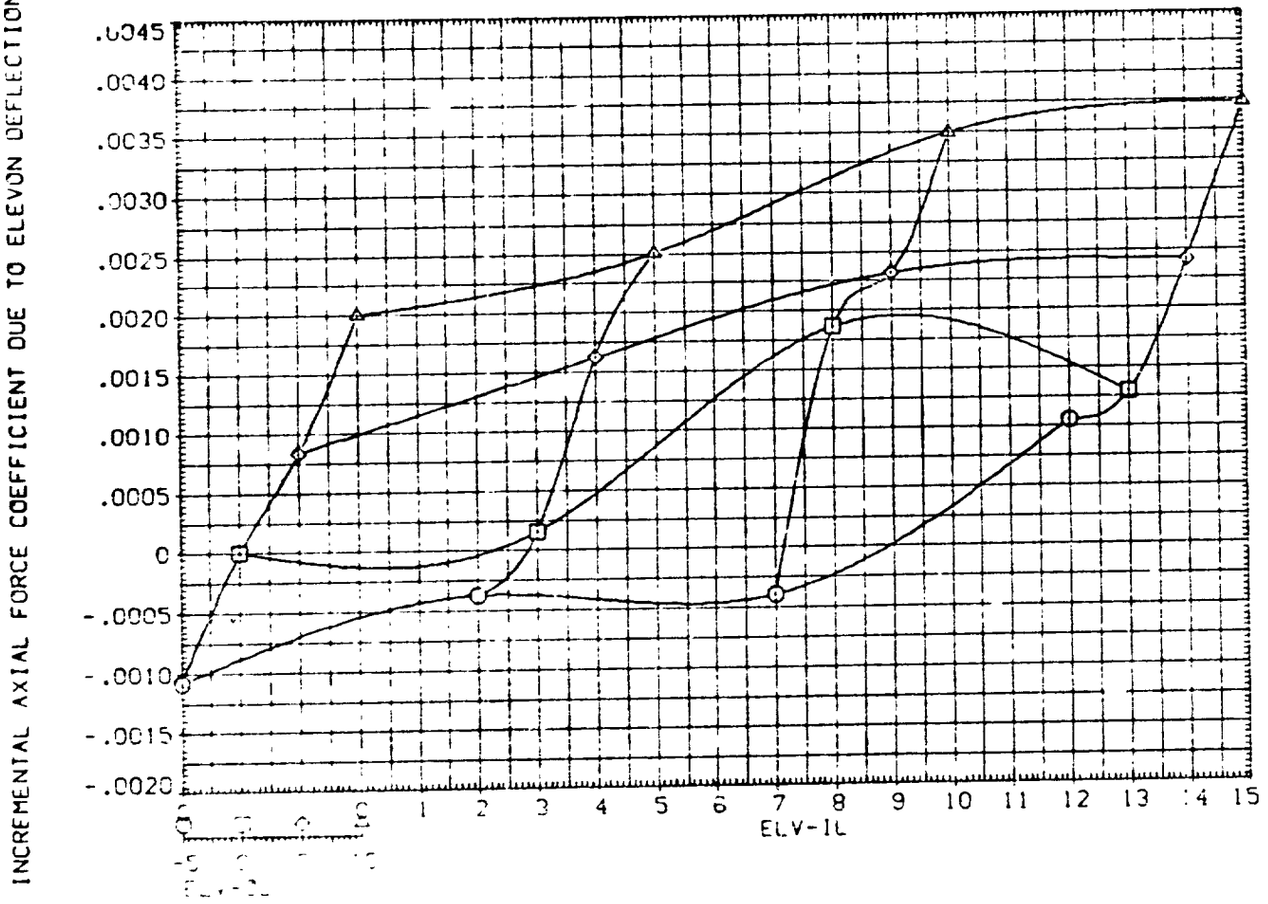
MSFC WT 622 (IA125) 74 OTS. M=2.74, ALPHA= 6.0 (BINGSI)

PARAMETRIC VALUES

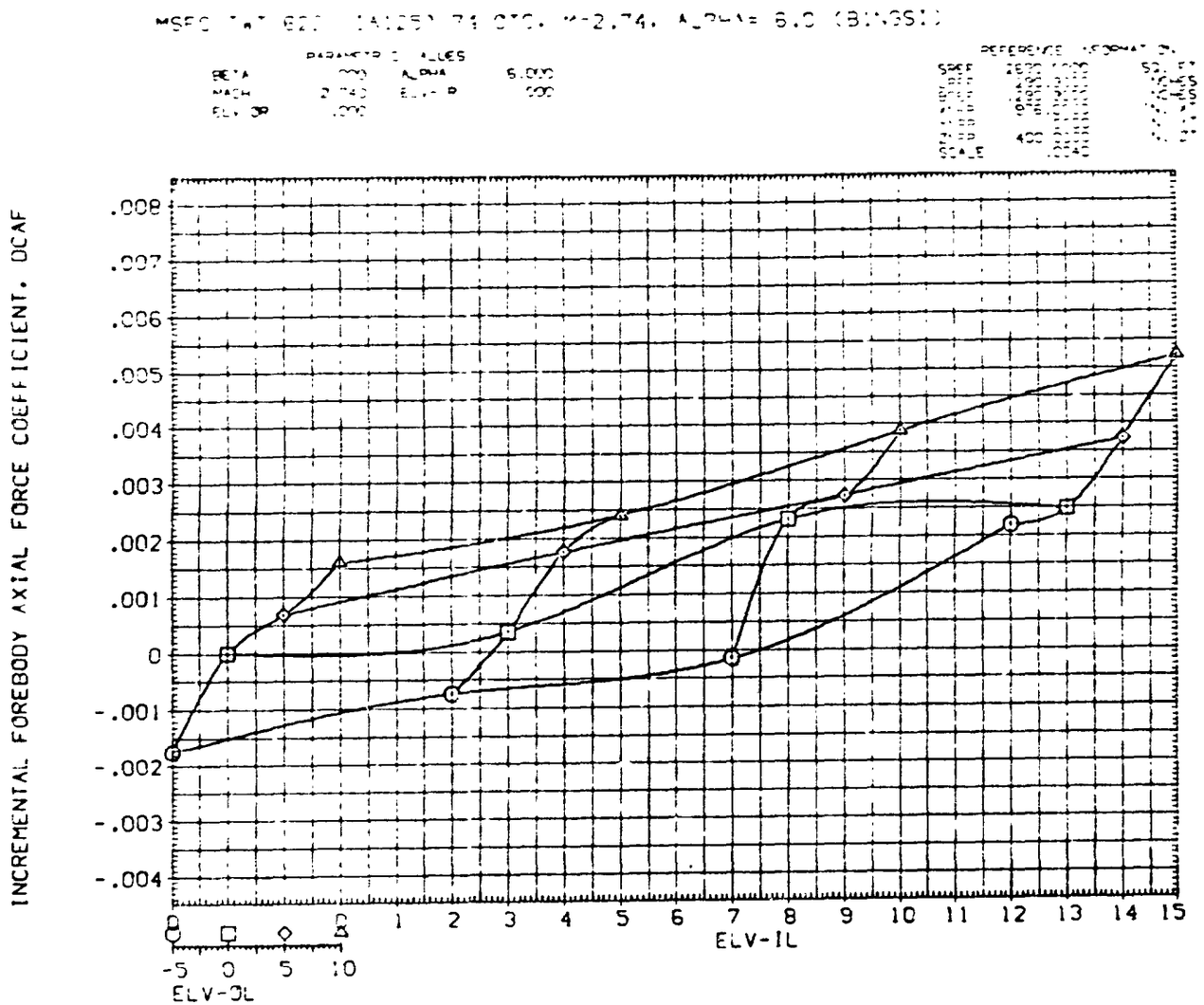
BETA	.000	ALPHA	6.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	0.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

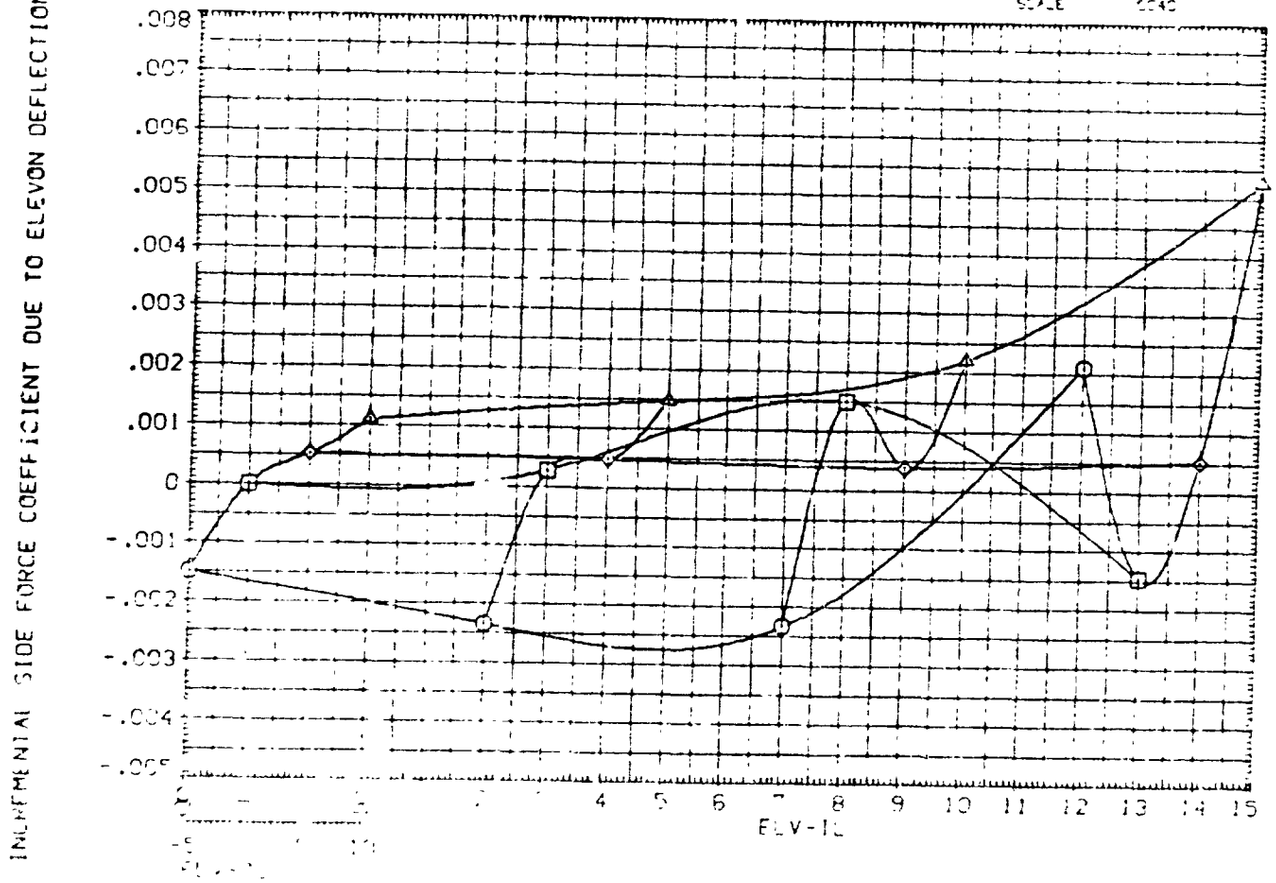
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA= 6.0 (BINGSI)

PARAMETRIC VALUES

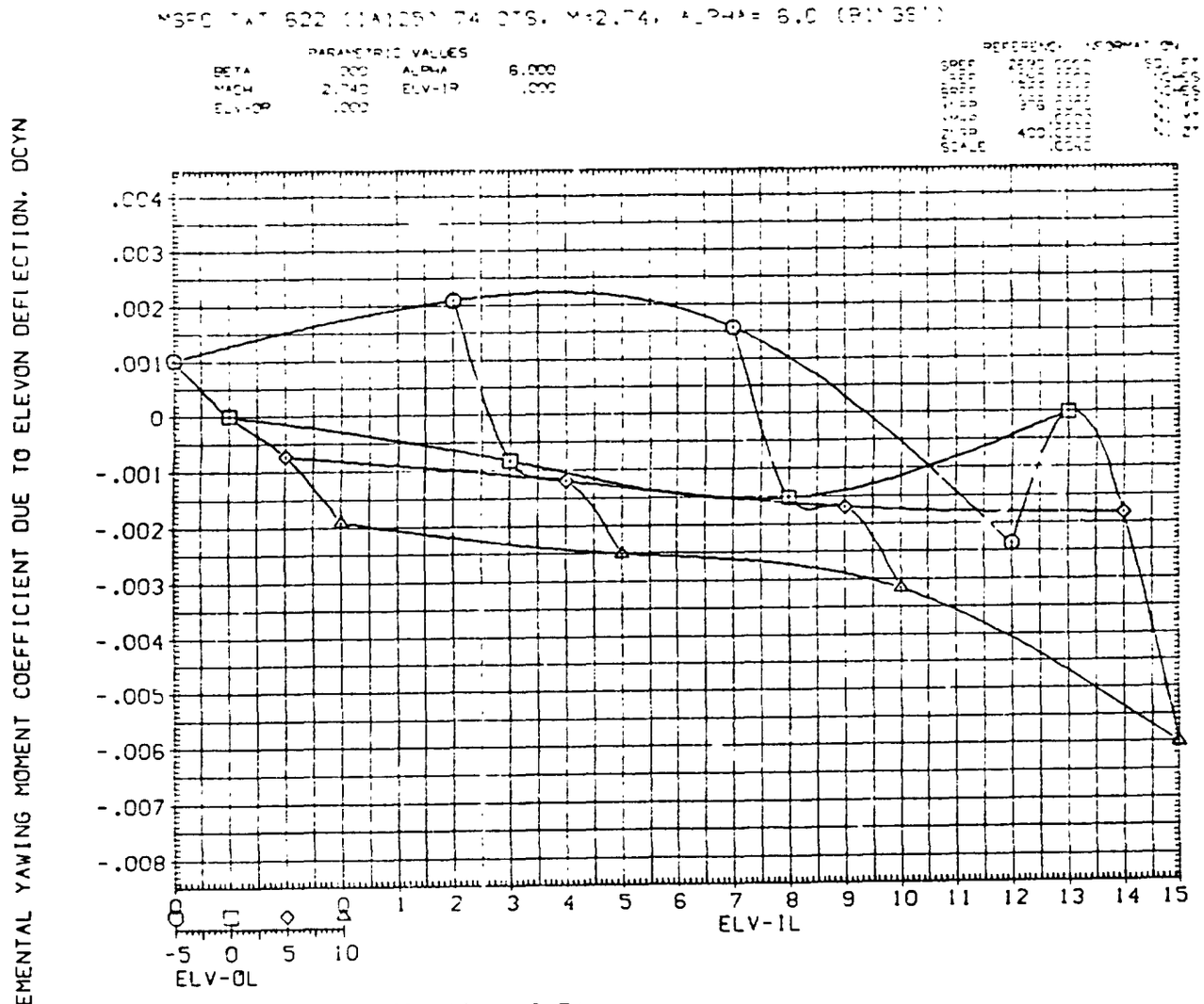
BETA	.000	ALPHA	6.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	[illegible]		SQ. FT
BREF	[illegible]		INCHES
CREF	[illegible]		INCHES
XMRP	[illegible]		XT
YMRP	[illegible]		YT
ZMRP	430		ZT
SCALE			



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

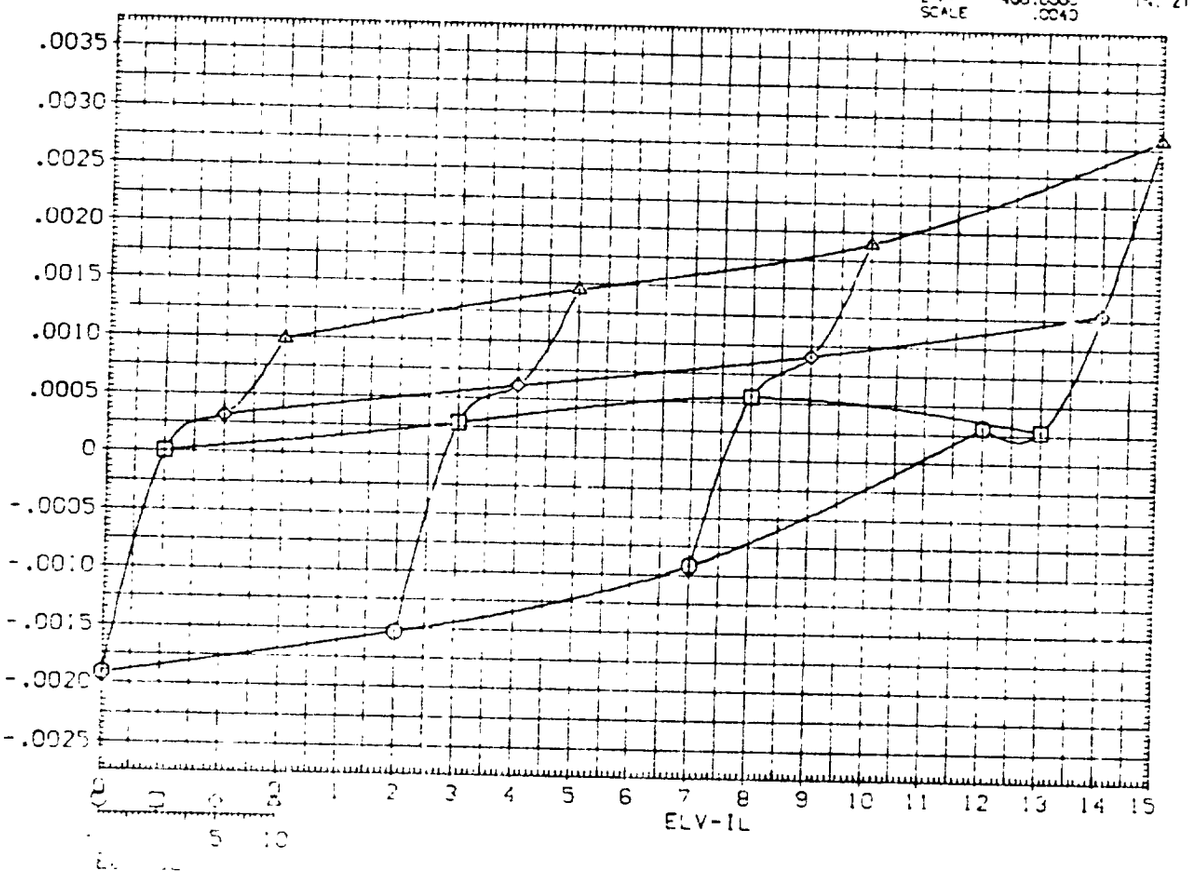
MSFC TWT 622 (IA125) 74 DTS. M=2.74. ALPHA= 6.0 (BINGSI)

PARAMETRIC VALUES

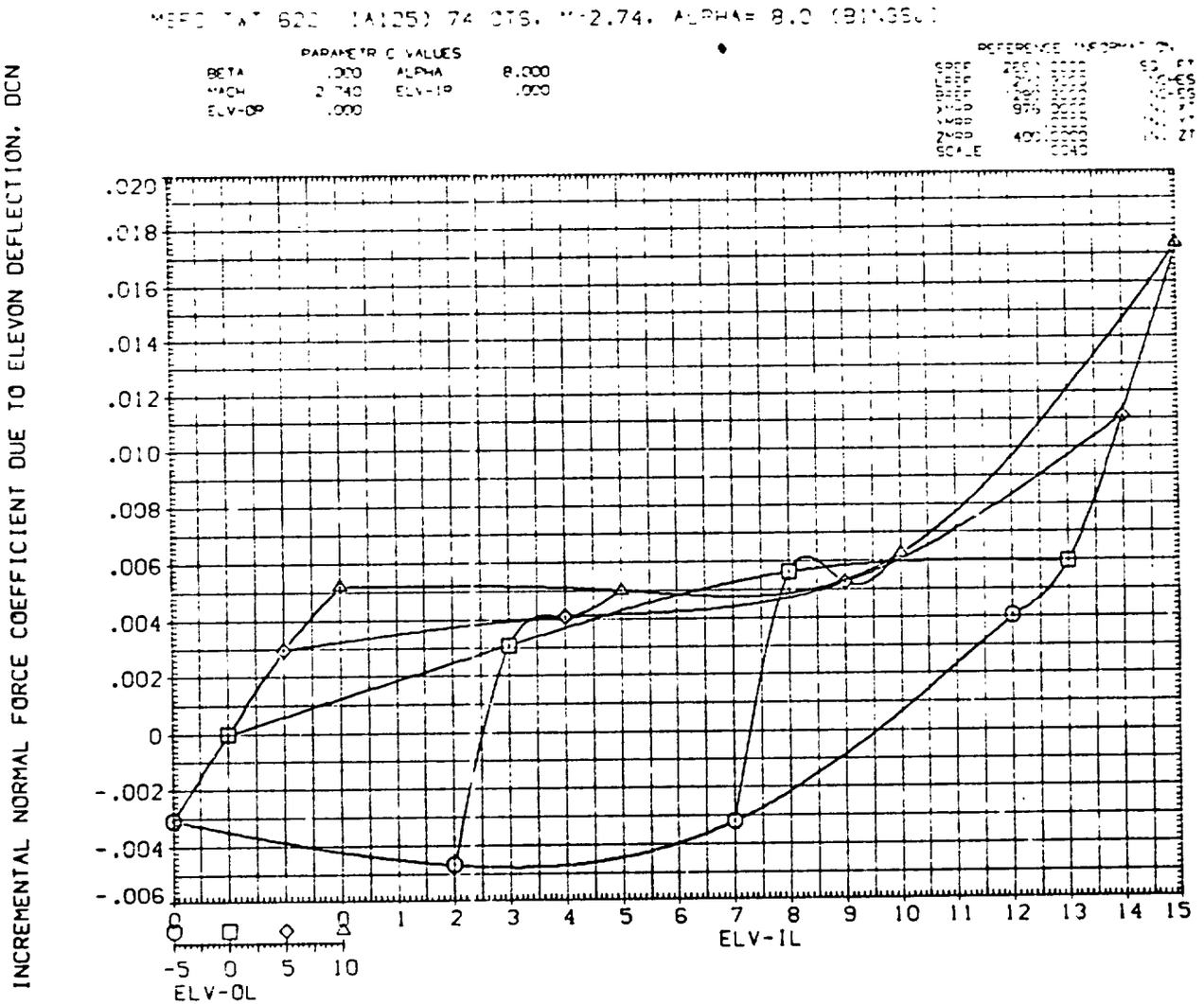
BETA	.000	ALPHA	6.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2683.0000	SQ. FT
BREF	[illegible]	INCHES
CREF	[illegible]	INCHES
XMRP	978.0000	[illegible]
YMRP	.0000	[illegible]
ZMRP	400.0000	[illegible] ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

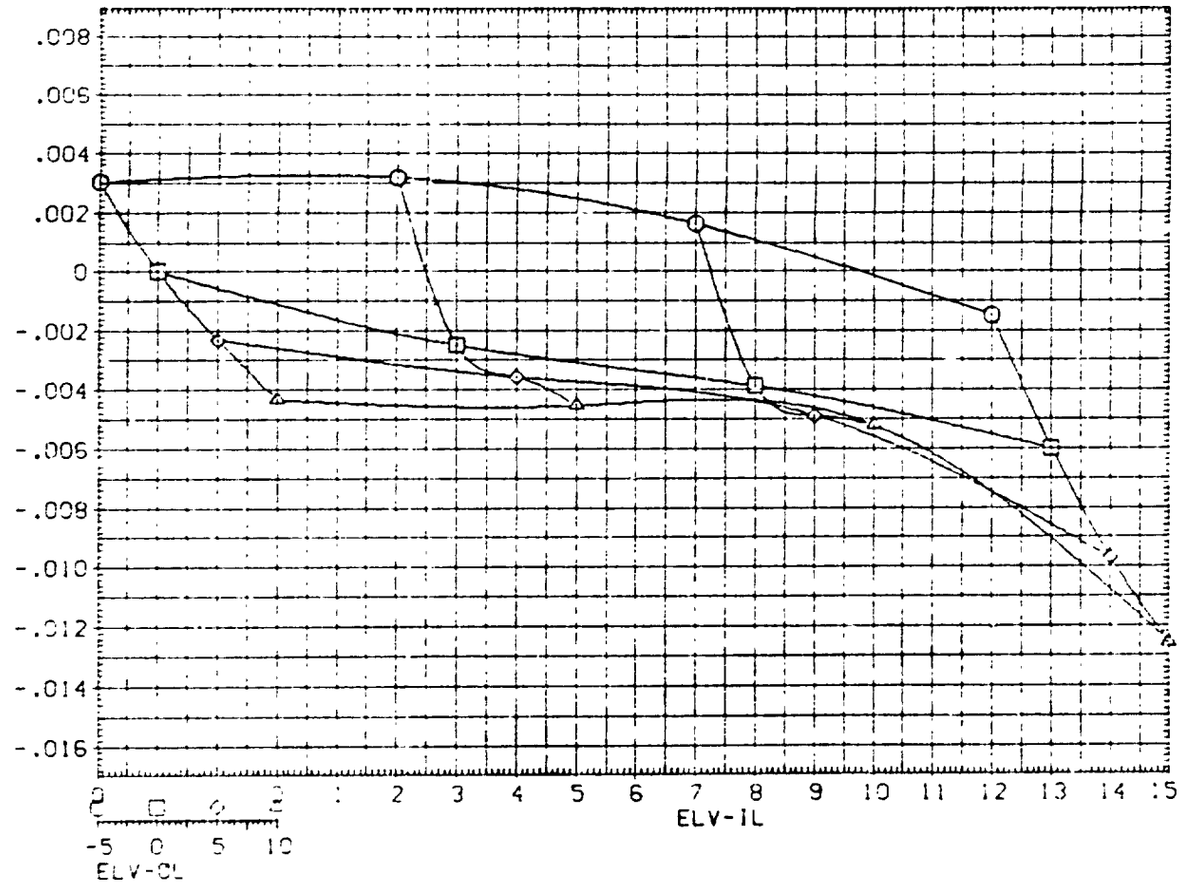
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA= 8.0 (BINGSJ)

PARAMETRIC VALUES

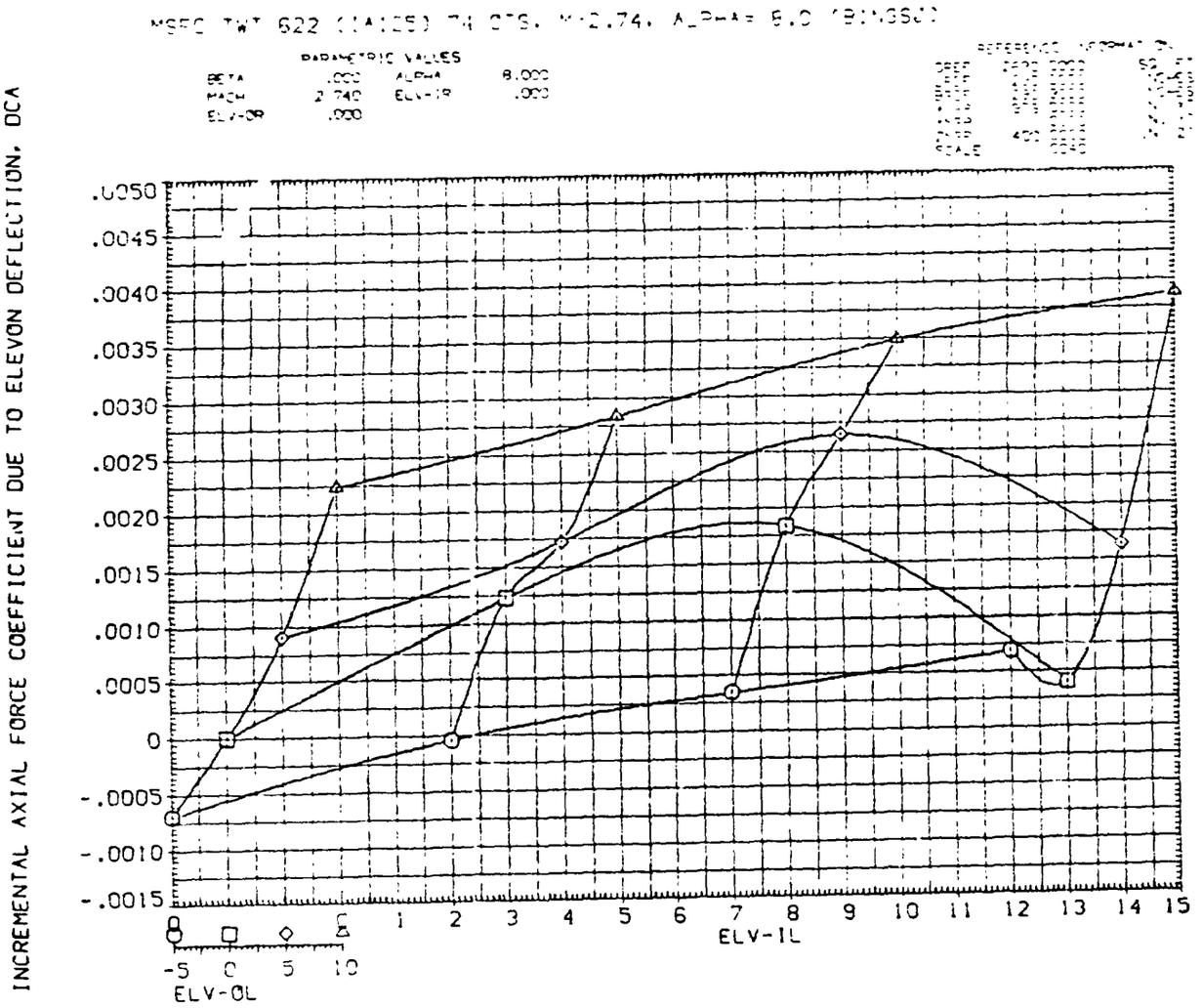
BETA	.000	ALPHA	8.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	[illegible]	INCHES
BREF	[illegible]	INCHES
XMRP	975.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0042	



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

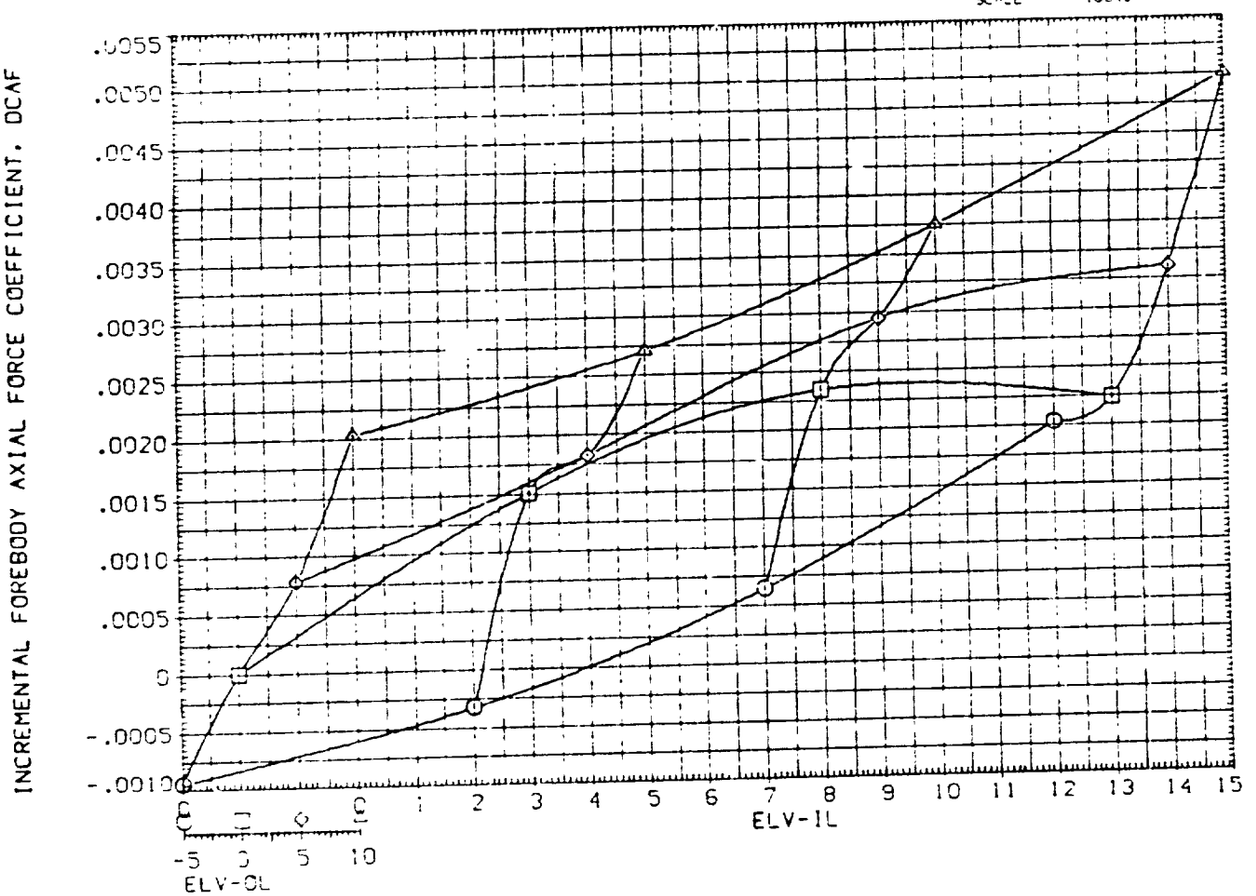
MSFC TWT 622 (1A125) 74 OTS. M=2.74. ALPHA= 8.0 (BINGSJ)

PARAMETRIC VALUES

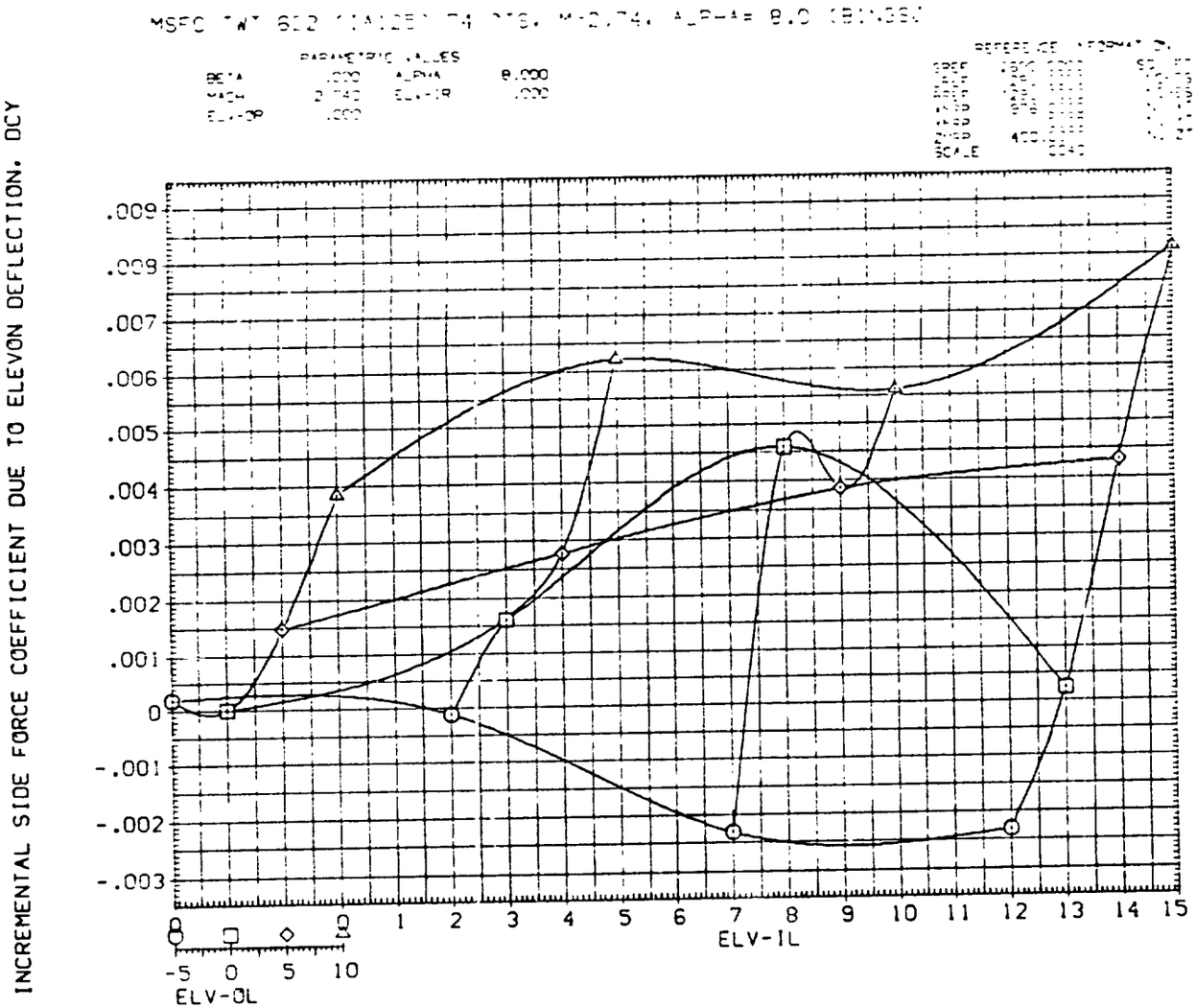
BETA	.000	ALPHA	8.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1265.3000	INCHES
BREF	1265.3000	INCHES
XMRP	[illegible]	[illegible]
YMRP	[illegible]	[illegible]
ZMRP	400.0000	[illegible]
SCALE	[illegible]	



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

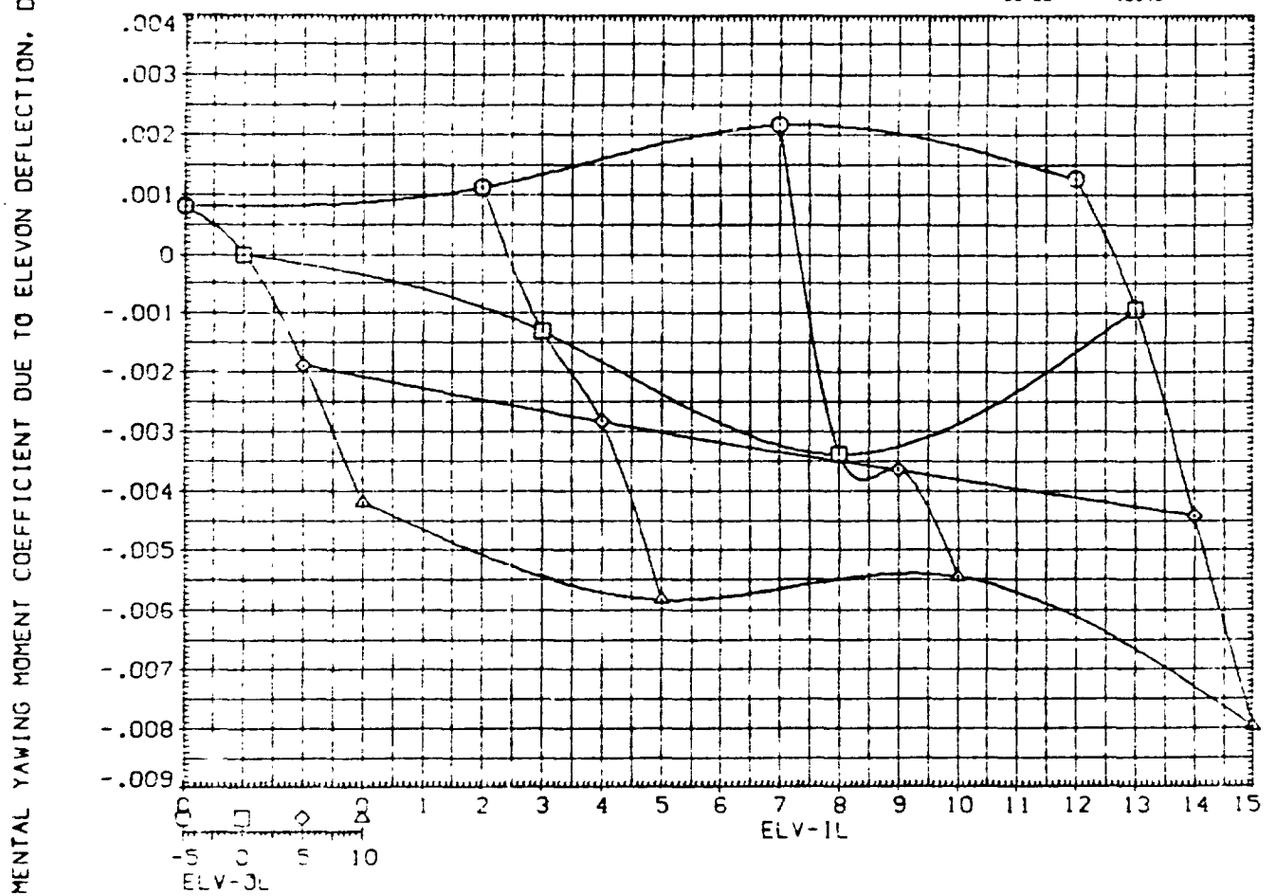
MSFC TWT 622 (IA125) 74 OTS. M=2.74, ALPHA= 8.0 (BINGSJ)

PARAMETRIC VALUES

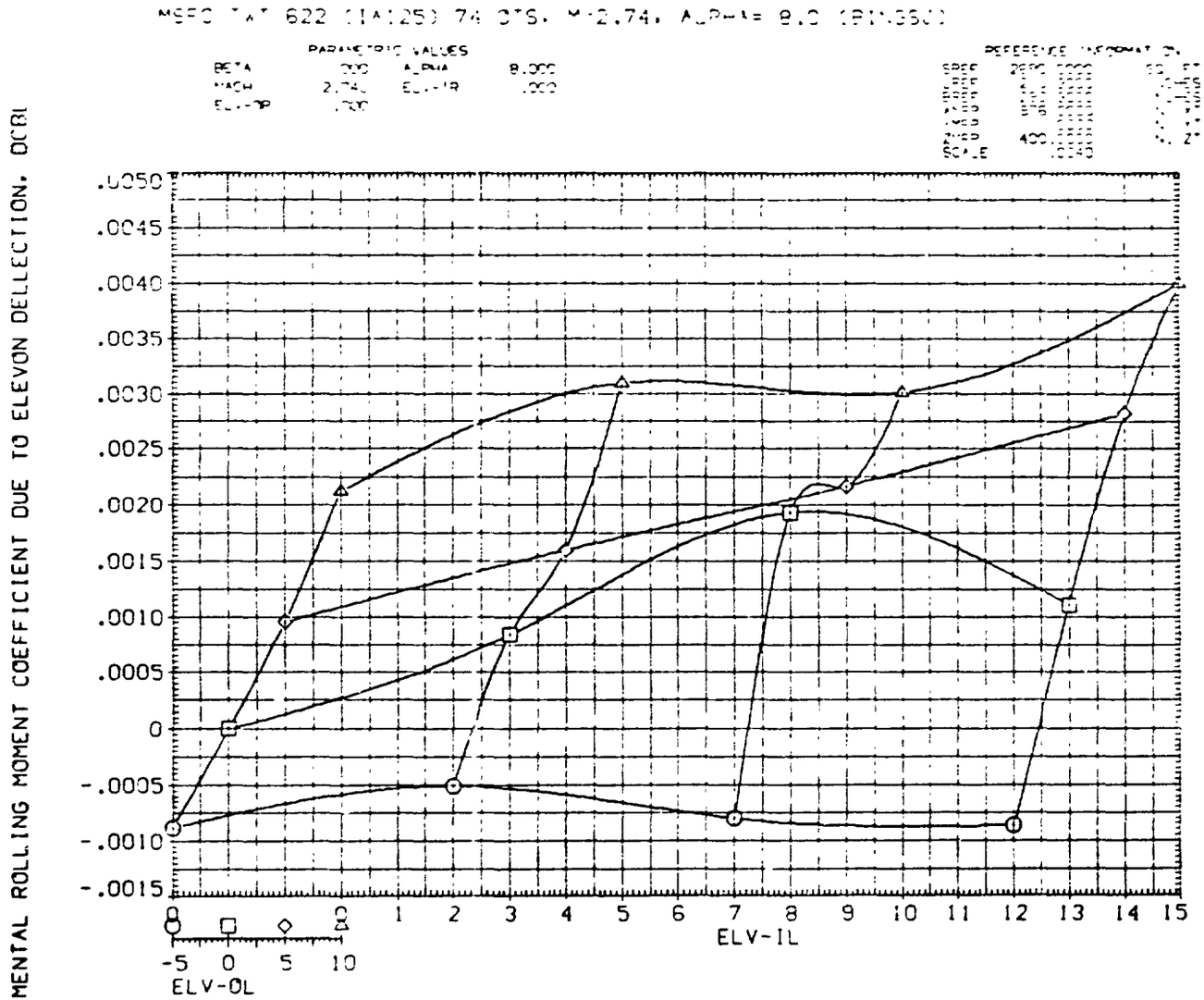
BETA	.000	ALPHA	8.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

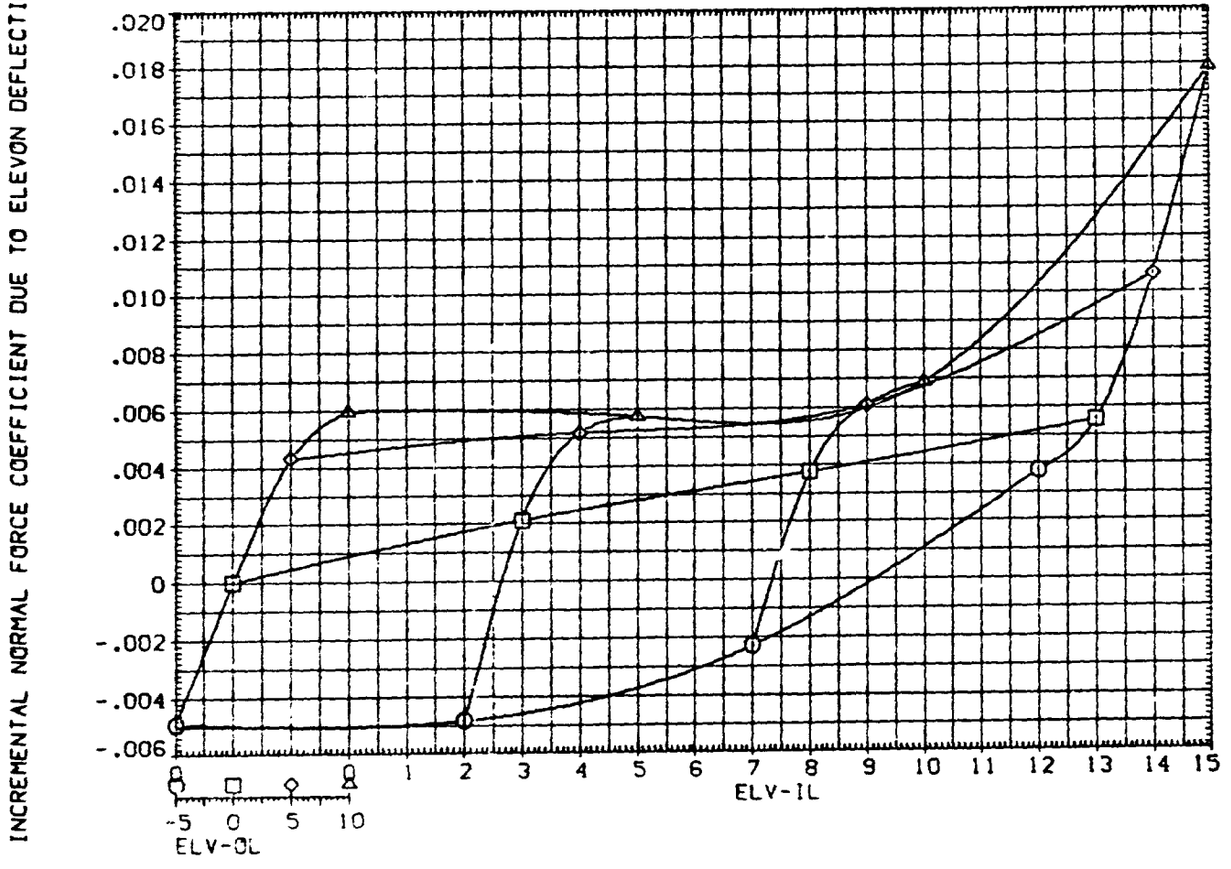
MSFC TWT 622 (IA125) 74 OTS, M=2.74, ALPHA=10.0 (BINGSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

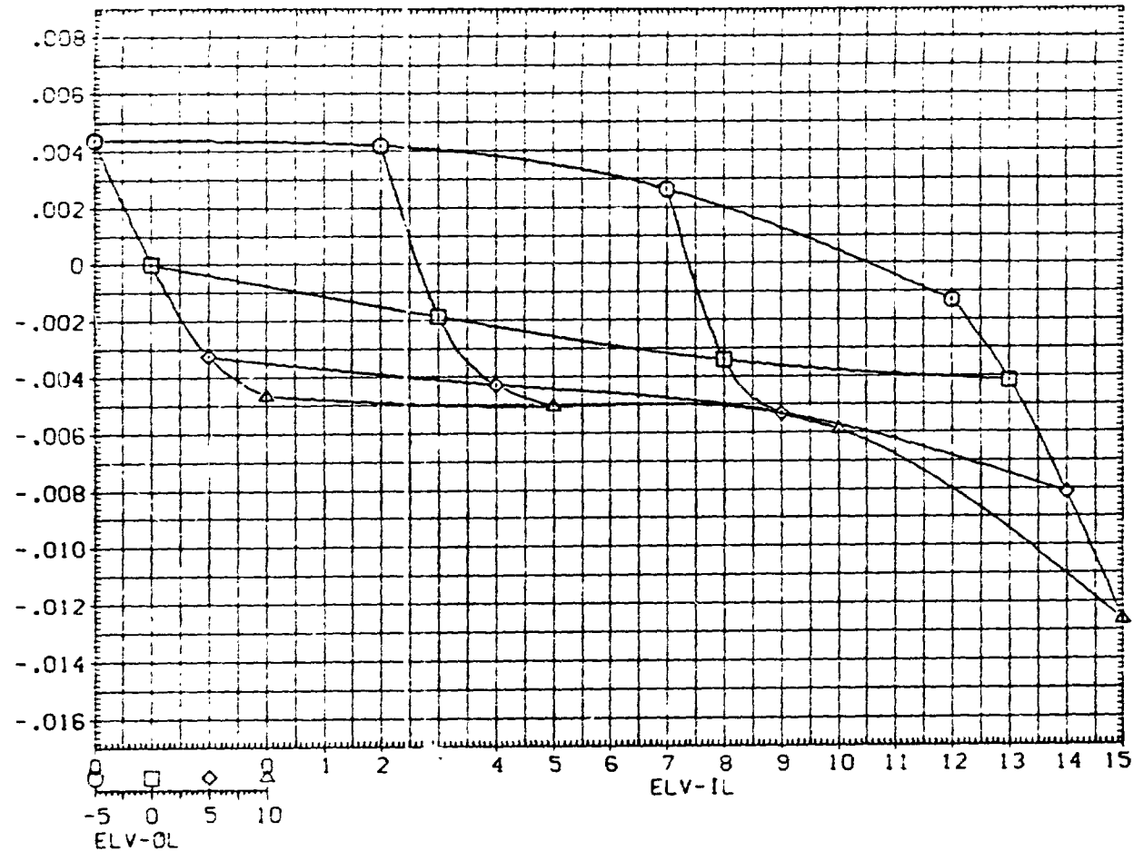
MSFC TWT 622 (IA125) 74 CTS. M=2.74. ALPHA=10.0 (BIWGSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	[illegible]		50. FT
LREF	[illegible]		[illegible] INCHES
BREF	[illegible]		[illegible] INCHES
XMRP	[illegible]		[illegible] FT
YMRP	[illegible]		[illegible] FT
ZMRP	[illegible]		[illegible] FT
SCALE	.0540		



ELEVON EFFECTIVENESS FOR MACH = 2.74

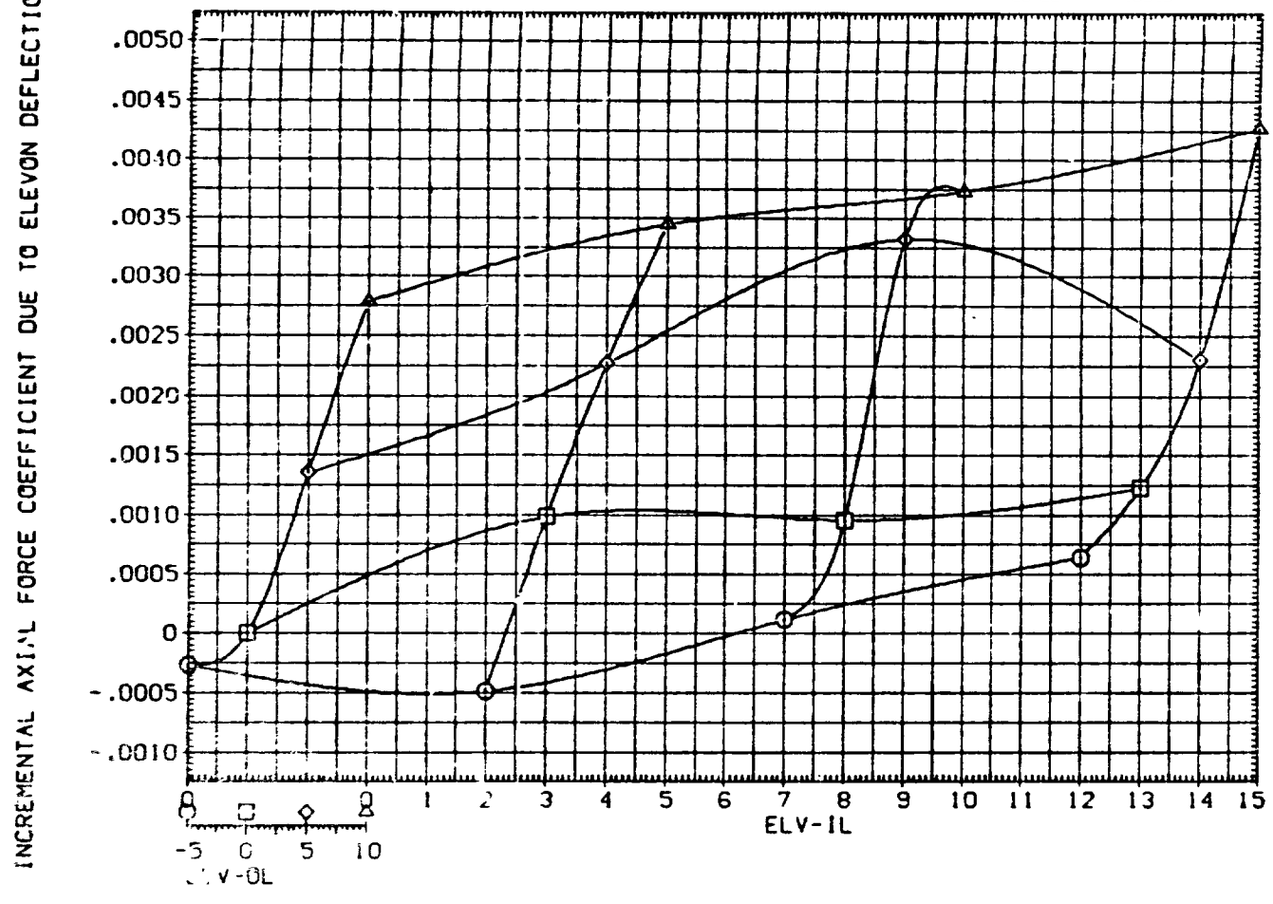
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=1[illegible].0 (BINGSK)

PARAMETRIC VALUES

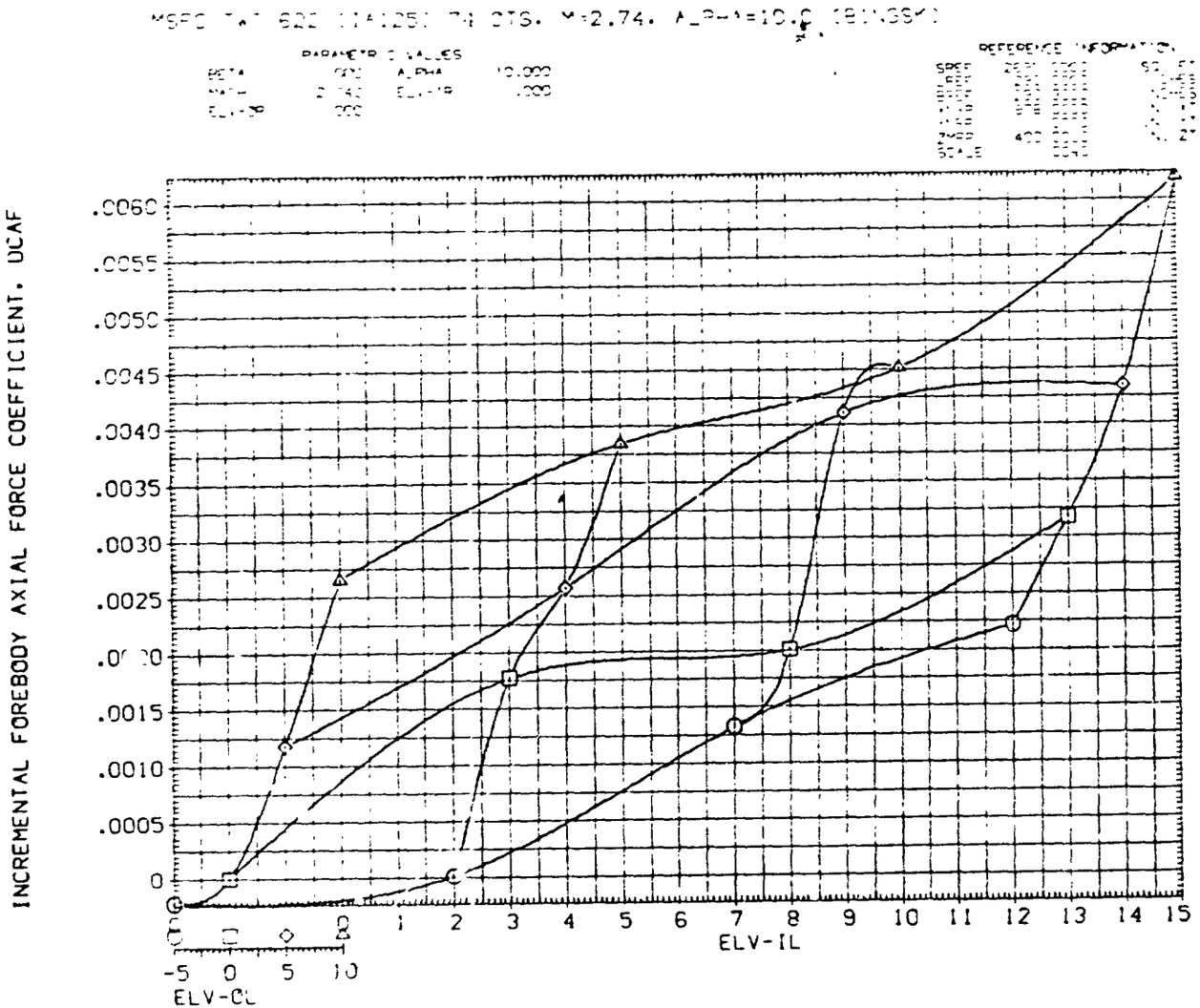
BETA	.000	ALPHA	10.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.3000	INCHES
BREF	1290.3000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

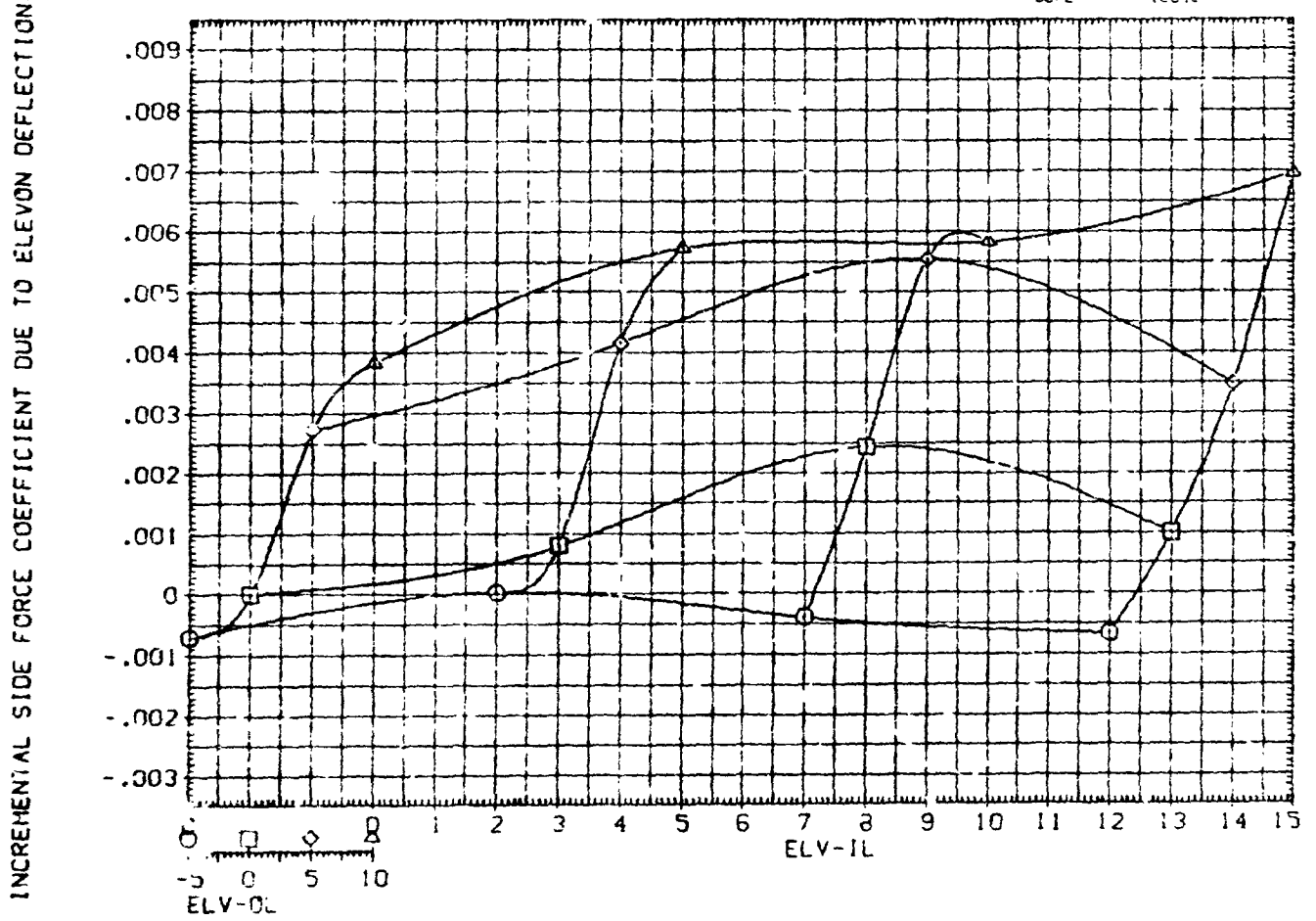
MSFC TWT 622 (IA125) 74 OTS. M=2.74. ALPHA=10.0 (BINGSK)

PARAMETRIC VALUES

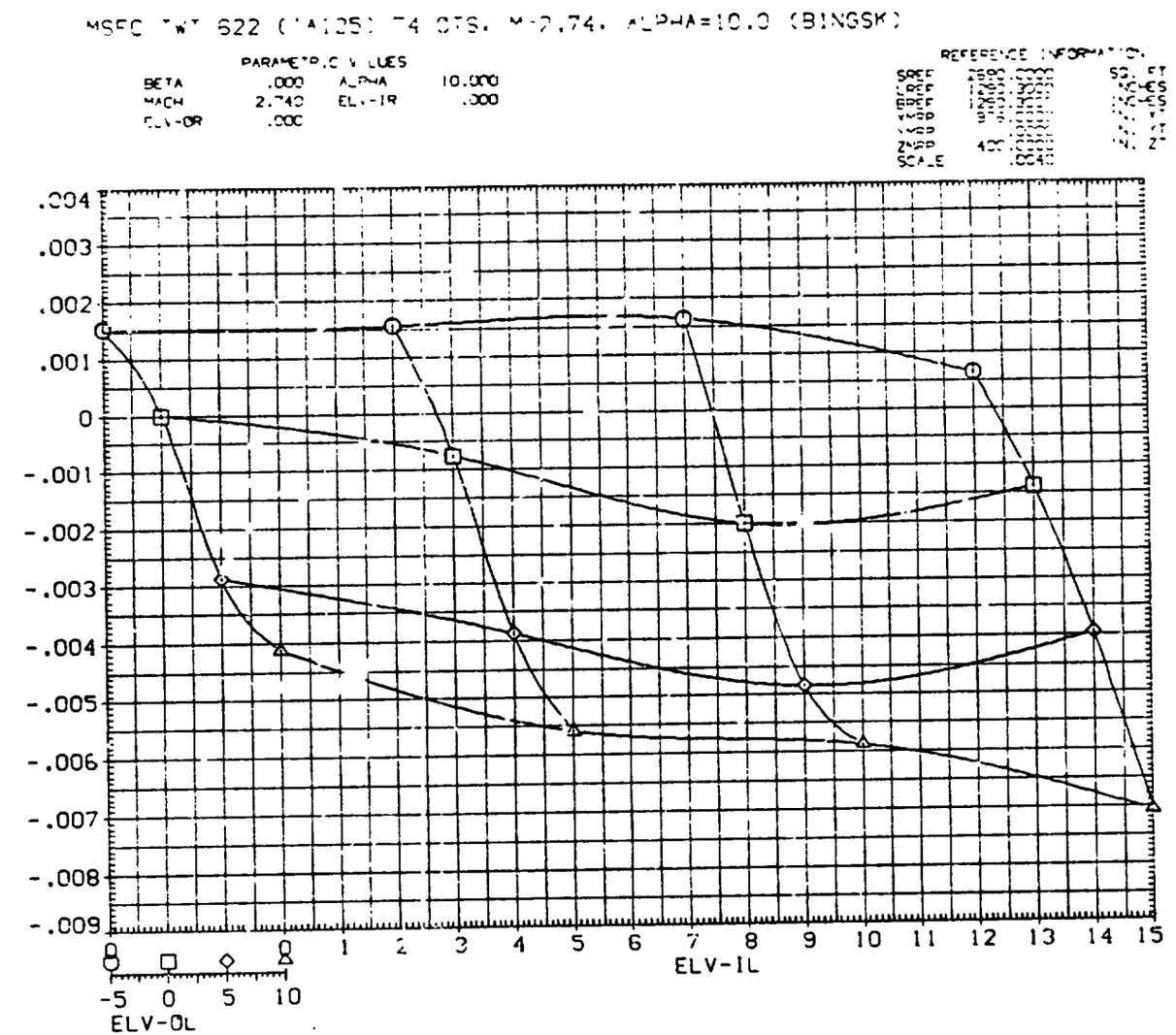
BETA	.000	ALPHA	10.000
MACH	2.740	ELV-IR	.000
ELV-OR	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LRE	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74



ELEVON EFFECTIVENESS FOR MACH = 2.74

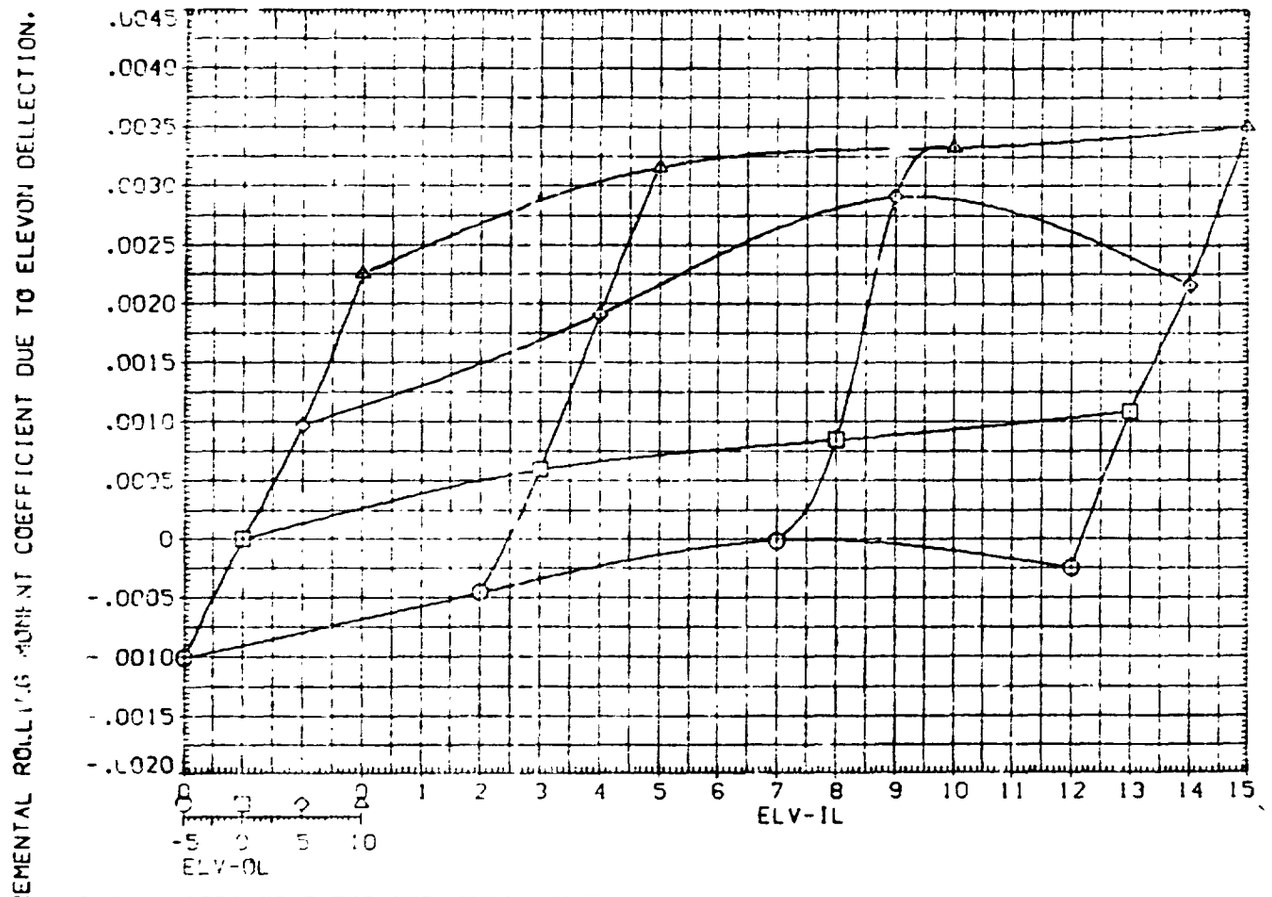
MSFC TWT 612 (IA125) 74 DTS. M-2.74. ALPHA=10.0 (BINGSK)

PARAMETRIC VALUES

BETA	.000	ALPHA	10.000
MACH	2.740	ELV-IB	.000
ELV-OB	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT
LREF	1290.0000	INCHES
BREF	1290.0000	INCHES
XMRP	976.0000	IN. XT
YMRP	.0000	IN. YT
ZMRP	400.0000	IN. ZT
SCALE	.0040	



ELEVON EFFECTIVENESS FOR MACH = 2.74

APPENDIX

TABULATED SOURCE DATA

Tabulations of plotted data are available on request from Data Management Services.

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1ND01) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 68/ 0 RN/L = 5.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.599	-11.740	-.84330	.34640	.00970	-.00510	.00640	.08850	.00990	.03770	.07030	.09890
.599	-9.590	-.69010	.28810	.01080	-.00570	.00530	.09510	.00960	.03670	.06560	.09630
.599	-7.360	-.55860	.23390	.00440	-.00190	.00400	.10010	.00960	.03660	.06270	.09380
.599	-5.160	-.43580	.18340	.00180	-.00050	.00340	.10940	.00920	.03530	.06010	.08660
.599	-2.940	-.30910	.13690	-.00350	.00140	.00170	.11100	.00910	.03400	.06180	.08350
.599	-.730	-.18300	.09120	-.00800	.00300	.00090	.11220	.00870	.03330	.06190	.09050
.599	1.480	-.05780	.04770	-.00940	.00330	.00040	.10880	.00850	.03250	.06100	.08010
.599	3.710	.06700	.00680	-.01210	.00430	.00020	.10330	.00850	.03250	.06140	.07900
.599	5.960	.19740	-.03760	-.01700	.00610	-.00090	.09390	.00840	.03200	.06210	.07710
.599	8.200	.33140	-.08430	-.01990	.00710	-.00190	.08070	.00830	.03160	.06610	.07580
.599	10.270	.44860	-.13000	-.02360	.00820	-.00260	.06880	.00810	.03100	.06620	.07420
.599	-.740	-.18800	.09430	-.00570	.00200	.00150	.11130	.00890	.03390	.06210	.08110
	GRADIENT	.05657	-.01957	-.00121	.00041	-.00023	-.00120	-.00009	-.00035	-.00009	-.00063

RUN NO. 69/ 0 RN/L = 6.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.902	-13.290	-1.02320	.42240	-.00780	.00610	.00390	.12780	.01260	.04810	.07090	.10210
.902	-10.860	-.81650	.33440	-.00720	.00650	.00340	.13620	.01170	.04470	.06930	.09630
.902	-8.280	-.62330	.25300	-.01420	.01040	.00110	.14110	.01100	.04190	.06490	.09080
.902	-5.850	-.44960	.18220	-.01770	.01210	.00000	.13980	.01090	.04170	.06240	.08870
.902	-3.400	-.28080	.11220	-.01790	.01300	-.00040	.14660	.00980	.03730	.05850	.08070
.902	-.950	-.12100	.03680	-.02390	.01500	-.00210	.14490	.00990	.03770	.05940	.07950
.902	1.460	.03300	-.03990	-.02530	.01570	-.00260	.14190	.00970	.03690	.05900	.07890
.902	3.860	.17160	-.08130	-.02470	.01380	-.00360	.13840	.00950	.03630	.06020	.07790
.902	6.290	.30090	-.11460	-.02850	.01440	-.00390	.13500	.00970	.03690	.06480	.07940
.902	8.760	.44270	-.15460	-.03100	.01410	-.00480	.12750	.00970	.03700	.07170	.08040
.902	10.980	.57120	-.20560	-.03150	.01200	-.00600	.12140	.00960	.03680	.07060	.07500
.902	-.930	-.11450	.03400	-.02580	.01630	-.00220	.14710	.00990	.03760	.05920	.07950
	GRADIENT	.06248	-.02672	-.00090	.00013	-.00042	-.00114	-.00005	-.00015	.00019	-.00037

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N001) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 717 0 RN/L = 6.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.044	-14.300	-1.20780	.53690	.01330	-.00360	.00610	.22540	.01580	.06020	.09090	.10560
1.044	-11.630	-.95060	.42420	.00640	.00000	.00440	.23720	.01390	.05260	.08970	.09950
1.044	-8.900	-.72050	.32460	.00120	.00280	.00300	.23740	.01350	.05150	.08960	.09690
1.044	-6.300	-.52420	.24540	-.00200	.00420	.00220	.24360	.01290	.04900	.06540	.09210
1.044	-3.720	-.35090	.17720	-.00710	.00700	.00090	.24710	.01210	.04620	.08260	.08850
1.044	-1.180	-.18130	.11140	-.00950	.00770	.00030	.24670	.01150	.04390	.08160	.08710
1.044	1.300	-.01750	.03590	-.01240	.00900	-.00070	.24460	.01150	.04370	.07880	.08610
1.044	3.760	.14380	-.03820	-.01600	.01020	-.00140	.23860	.01170	.04440	.07990	.08420
1.044	6.320	.30650	-.09980	-.01780	.00890	-.00280	.23010	.01160	.04420	.08180	.08370
1.044	8.840	.45740	-.15290	-.02160	.00970	-.00380	.21970	.01180	.04510	.08690	.08250
1.044	11.130	.58930	-.20500	-.02040	.00820	-.00240	.21360	.01200	.04590	.08830	.07680
1.044	-1.160	-.17630	.10910	-.01120	.00850	.00000	.24650	.01180	.04490	.08210	.08020
	GRADIENT	.06613	-.02995	-.00119	.00044	-.00032	-.00110	-.00005	-.00023	-.00046	-.00056

RUN NO. 707 0 RN/L = 5.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.197	-15.050	-1.28150	.52950	-.00020	.00080	.00540	.25420	.01560	.05930	.08290	.09560
1.197	-12.220	-1.00370	.41170	-.00170	.00160	.00450	.26220	.01470	.05620	.08630	.09400
1.197	-9.310	-.74250	.30670	-.00490	.00350	.00250	.26500	.01350	.05160	.08270	.09020
1.197	-6.570	-.52240	.21580	-.00530	.00280	.00130	.26500	.01310	.04990	.08220	.09150
1.197	-3.890	-.32150	.13660	-.01120	.00550	-.00030	.27070	.01230	.04700	.07890	.08990
1.197	-1.200	-.13290	.06250	-.01490	.00880	-.00090	.27480	.01180	.04480	.07720	.08800
1.197	1.310	.02660	-.00070	-.01580	.00790	-.00180	.27150	.01160	.04410	.07500	.08680
1.197	3.830	.18210	-.05700	-.01720	.00750	-.00250	.26650	.01150	.04370	.07660	.08500
1.197	6.460	.34170	-.12440	-.01950	.00850	-.00350	.26070	.01120	.04270	.07730	.08100
1.197	9.010	.49850	-.18630	-.02050	.00760	-.00380	.25220	.01140	.04330	.07970	.07710
1.197	11.410	.63950	-.23130	-.02610	.00900	-.00560	.23920	.01180	.04490	.08200	.07710
1.197	-1.190	-.12780	.06330	-.01620	.00970	-.00130	.27720	.01150	.04380	.07500	.08620
	GRADIENT	.06510	-.02526	-.00074	.00009	-.00029	-.00061	-.00009	-.00035	-.00036	-.00061

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N001) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 135/ 0 RN/L = 6.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.466	-14.850	-1.22510	.50660	-.00240	.00200	.00530	.29900	.01130	.04320	.05790	.07090
1.466	-12.050	-.95500	.38720	-.00510	.00340	.00410	.29470	.01150	.04370	.05980	.06710
1.466	-9.220	-.71040	.28160	-.00570	.00280	.00320	.29490	.01030	.03930	.05840	.06630
1.466	-6.440	-.49510	.19690	-.01290	.00540	.00150	.29380	.00950	.03620	.05620	.06470
1.466	-3.750	-.30150	.11880	-.01000	.00380	.00120	.29200	.00920	.03520	.05380	.06340
1.466	-1.090	-.12210	.05110	-.01370	.00540	.00010	.29250	.00910	.03480	.05290	.06330
1.466	1.490	.03830	-.00730	-.01780	.00830	-.00140	.29200	.00910	.03480	.05230	.06380
1.466	4.030	.18420	-.06220	-.01900	.00820	-.00230	.29010	.00910	.03460	.05370	.06460
1.466	6.580	.33200	-.11650	-.02230	.00990	-.00360	.28550	.00900	.03420	.05620	.06400
1.466	9.160	.46190	-.17180	-.02300	.00930	-.00390	.28010	.00890	.03410	.05640	.06290
1.466	11.670	.63250	-.21330	-.02590	.00910	-.00450	.27320	.00890	.03400	.05760	.06270
1.466	-1.070	-.11540	.04810	-.01340	.00580	.00000	.29420	.00910	.03470	.05310	.06350
	GRADIENT	.06243	-.02321	-.00160	.00058	-.00046	-.00024	-.00001	-.00007	-.00004	.00016

RUN NO. 160/ 0 RN/L = 5.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.120	-.74130	.29090	.00240	.00000	.00260	.28770	.00390	.01480	.02530	.03120
2.740	-9.940	-.61180	.23840	-.00190	.00250	.00120	.27780	.00380	.01450	.02600	.03140
2.740	-7.590	-.48220	.19110	-.00090	.00210	.00120	.26810	.00400	.01540	.02610	.03310
2.740	-5.290	-.35250	.14190	-.00210	.00230	.00080	.25820	.00430	.01650	.02560	.03320
2.740	-2.980	-.23500	.10050	-.00450	.00400	.00050	.25240	.00450	.01710	.02510	.03200
2.740	-.690	-.12880	.06810	-.00710	.00530	-.00080	.25030	.00450	.01720	.02540	.03000
2.740	1.570	-.02830	.03740	-.00600	.00370	-.00020	.24670	.00450	.01740	.02540	.02920
2.740	3.830	.07480	-.00070	-.00660	.00360	-.00050	.24310	.00450	.01730	.02500	.02840
2.740	6.140	.18670	-.04010	-.00750	.00400	-.00030	.24030	.00460	.01750	.02430	.02730
2.740	8.460	.30540	-.08340	-.00870	.00270	-.00110	.23640	.00460	.01780	.02450	.02650
2.740	10.620	.42740	-.12990	-.01110	.00350	-.00170	.23300	.00460	.01750	.02520	.02550
2.740	-.610	-.10900	.06030	-.00610	.00450	-.00020	.25110	.00450	.01730	.02530	.02940
	GRADIENT	.04539	-.01473	-.00023	-.00012	-.00011	-.00139	.00000	.00004	-.00001	-.00051

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N002) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 975.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 1317 0 RN/L = 4.91 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.595	-10.940	-.82290	.03240	.43560	-.18150	.04620	.06540	.00900	.03450	.08530	.09450
.595	-8.880	-.82[illegible]	.33230	.36770	-.16240	.04010	.07790	.00890	.03400	.08120	.09300
.595	-6.710	-.8[illegible]410	.32950	.29730	-.13330	.03200	.09120	.00950	.03270	.07370	.08850
.595	-4.570	-.82030	.33290	.20790	-.10110	.02370	.0210	.00860	.03270	.06760	.08660
.595	-2.450	-.81740	.33090	.11630	-.05750	.01380	.10420	.00940	.03210	.06510	.08440
.595	-.310	-.81130	.32470	.02970	-.01650	.00670	.10690	.00910	.03470	.06290	.08230
.595	1.810	-.82100	.32850	-.05690	.02400	.00730	.10650	.00850	.03610	.06380	.08560
.595	3.930	-.8[illegible]440	.32210	-.13560	.06140	-.00570	.10700	.00980	.03720	.06300	.08730
.595	6.070	-.80070	.31060	-.22[illegible]00	.10140	-.01520	.10620	.00990	.03780	.06700	.09510
.595	8.230	-.8[illegible]650	.32[illegible]80	-.30650	.13980	-.02530	.09840	.00990	.03770	.04990	.11280
.595	10.250	-.8[illegible]640	.33000	-.37930	.16170	-.033[illegible]0	.08860	.01030	.03933	.04760	.11550
.595	-.3[illegible]0	-.8[illegible]840	.33680	.02780	-.01580	.00630	.10450	.00940	[illegible]	.06370	.08430
	GRADIENT	.00039	-.00[illegible]2	-.04041	.019[illegible]3	-.00335	.00052	.00015	[illegible]	-.00054	.00017

RUN NO. 1317 0 RN/L = 6.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.903	-11.900	-.98040	.34940	.59940	-.26190	.06210	.07910	.01400	.05320	.08630	.10710
.903	-9.630	-.97320	.35440	.48620	-.21890	.05020	.09260	.01300	.04960	.08430	.10340
.903	-7.250	-.97740	.37540	.37270	-.17610	.04130	.09990	.01280	.04870	.08050	.10020
.903	-4.920	-.97[illegible]50	.39250	.25230	-.12100	.03000	.10990	.01230	.04700	.07570	.09650
.903	-2.570	-.99840	.40510	.14660	-.06970	.01860	.11830	.01240	.04720	.07540	.09540
.903	-.360	-1.01360	.4[illegible]490	.03650	-.01610	.00840	.12110	.01250	.04770	.07790	.09180
.903	1.890	-.98790	.39550	-.07290	.03840	.00050	.12800	.01230	.04670	.06990	.09350
.903	4.200	-.99960	.39900	-.18810	.09410	-.00970	.13110	.01300	.04950	.05870	.09510
.903	6.510	-.99110	.38510	-.30430	.14900	-.02050	.13680	.01300	.04960	.04880	.09920
.903	8.860	-.98490	.37480	-.40860	.19050	-.02880	.13740	.01330	.05070	.04600	.10320
.903	1.080	-.98760	.36540	-.51920	.23230	-.04190	.13620	.01330	.05080	.04700	.10500
.903	-.330	-1.00280	.40860	.03210	-.01410	.00720	.12700	.01240	.04740	.07140	.09200
	GRADIENT	-.00201	.00103	-.04826	.02361	-.00428	.00237	.00006	.00020	-.00178	-.00021

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N0021 (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 128/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.047	-12.380	-1.21610	.48700	.66250	-.28730	.05960	.18160	.01750	.06660	.09760	.10280
1.047	-10.000	-1.20110	.49310	.54140	-.24360	.05760	.19090	.01750	.06650	.09980	.10460
1.047	-7.540	-1.18830	.49920	.41400	-.19270	.04530	.20150	.01660	.06320	.10070	.10310
1.047	-5.160	-1.17350	.50100	.29230	-.13740	.03210	.21030	.01610	.06130	.10080	.10290
1.047	-2.800	-1.17250	.50800	.16850	-.07790	.01980	.21600	.01560	.05930	.09940	.10330
1.047	-.420	-1.18660	.52030	.04160	-.01650	.01010	.22110	.01540	.05850	.09580	.10140
1.047	1.950	-1.15900	.49980	-.08460	.04510	.00130	.23550	.01540	.05940	.08700	.09890
1.047	4.330	-1.14710	.48640	-.21190	.10730	-.00990	.23780	.01600	.06090	.07850	.10060
1.047	6.730	-1.17910	.50280	-.33630	.16300	-.02520	.24960	.01570	.05990	.06590	.10080
1.047	9.150	-1.19270	.49990	-.45570	.21160	-.03940	.24030	.01610	.06120	.05230	.10790
1.047	11.450	-1.20240	.49170	-.56870	.25220	-.04950	.23420	.01620	.06160	.06150	.10790
1.047	-.340	-1.18400	.51870	.02890	-.01380	.00600	.22150	.01540	.05880	.09570	.10250
	GRADIENT	.00437	-.00359	-.05335	.02598	-.00412	.00336	.00005	.00020	-.00304	-.00045

RUN NO. 129/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.198	-12.790	-1.40240	.56050	.69850	-.28330	.07710	.20150	.01790	.06810	.09240	.09950
1.198	-10.390	-1.37760	.55100	.57760	-.24070	.06150	.20590	.01750	.06650	.09120	.09680
1.198	-7.850	-1.35780	.55000	.44140	-.18790	.04640	.20880	.01730	.06580	.09180	.09680
1.198	-5.330	-1.34440	.55090	.29340	-.12040	.03140	.22140	.01790	.06810	.09230	.09750
1.198	-2.890	-1.33640	.55040	.16100	-.06200	.01820	.23210	.01730	.06580	.09050	.09550
1.198	-.440	-1.33300	.55230	.02940	-.00290	.00870	.24390	.01610	.06130	.08450	.09520
1.198	2.000	-1.33140	.55310	-.09600	.04970	.00070	.25310	.01530	.05830	.07770	.09770
1.198	4.450	-1.34080	.55670	-.21980	.10320	-.00970	.25230	.01560	.05950	.07230	.10220
1.198	6.970	-1.35180	.56000	-.36440	.16500	-.02590	.25910	.01550	.05900	.06490	.10320
1.198	9.540	-1.36780	.55820	-.51010	.22130	-.04320	.25700	.01610	.06120	.06270	.10400
1.198	11.920	-1.38500	.56190	-.63330	.26530	-.05720	.25430	.01580	.06030	.06210	.10640
1.198	-.350	-1.34040	.56000	.01740	-.00390	.00450	.24990	.01550	.05890	.08190	.09650
	GRADIENT	-.00047	.00081	-.05179	.02241	-.00375	.00295	-.00024	-.00090	-.00251	.00092

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 DTS (R1N002) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 133/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.461	-12.740	-1.28550	.52570	.67140	-.27750	.08150	.25370	.01340	.05110	.07330	.08100
1.461	-10.340	-1.26670	.51970	.55000	-.23030	.06550	.25330	.01290	.04910	.07260	.07550
1.461	-7.830	-1.25600	.51560	.42240	-.17840	.04960	.27640	.01260	.04780	.07130	.06870
1.461	-5.340	-1.24730	.51290	.29300	-.12530	.03430	.28430	.01160	.04420	.06750	.06830
1.461	-2.900	-1.24120	.51100	.16390	-.06730	.02040	.29910	.01170	.04440	.06330	.06990
1.461	-.400	-1.23650	.51100	.03310	-.01040	.00870	.29280	.01140	.04350	.06180	.07120
1.461	2.010	-1.23490	.51000	-.08690	.04100	-.00090	.29740	.01130	.04310	.06560	.07200
1.461	4.500	-1.24460	.51350	-.21870	.09940	-.01480	.29340	.01190	.04520	.06130	.07800
1.461	6.990	-1.25390	.51810	-.34340	.14670	-.02940	.29390	.01190	.04510	.04890	.07910
1.461	9.510	-1.26920	.52270	-.47440	.20020	-.04510	.29210	.01220	.04650	.04890	.08090
1.461	11.870	-1.28470	.52790	-.59070	.24240	-.06040	.28760	.01270	.04960	.04780	.08310
1.461	-.380	-1.23670	.51140	.03070	-.01130	.00780	.29290	.01140	.04360	.06160	.07090
	GRADIENT	-.00035	.00027	-.05152	.02229	-.00468	.00071	.00002	.00008	-.00171	.00102

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N003) (29 MAY 75)

REFERENCE DATA

SREF = 2699.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 123/ 0 RN/L = 4.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.598	-10.930	-.14890	.06860	.43370	-.18280	.06070	.08390	.00870	.03330	.07150	.09180
.598	-8.870	-.15110	.07120	.35320	-.15420	.05240	.09250	.00830	.03160	.06990	.08860
.598	-6.690	-.15580	.07520	.26480	-.11790	.04040	.10040	.00780	.02990	.06710	.08310
.598	-4.550	-.15670	.07760	.18270	-.08230	.02920	.10810	.00770	.02940	.06480	.08000
.598	-2.430	-.15050	.08020	.09770	-.04450	.01620	.10970	.00790	.03010	.06350	.07970
.598	-.290	-.16290	.08100	.00900	-.00310	.00460	.11910	.00810	.03090	.05800	.07340
.598	1.820	-.15890	.07770	-.05850	.03230	-.00640	.12290	.00820	.03140	.05540	.07430
.598	3.950	-.15710	.07380	-.14730	.06730	-.01560	.12850	.00850	.03260	.05130	.07770
.598	6.090	-.14960	.06630	-.23190	.10590	-.02970	.12280	.00890	.03410	.04940	.08430
.598	8.250	-.15440	.06550	-.31590	.14110	-.04140	.11420	.00920	.03510	.04810	.09320
.598	10.280	-.15580	.06510	-.39920	.17440	-.05250	.10900	.00930	.03540	.04720	.09720
.598	-.330	-.16090	.07990	.01430	-.00640	.00500	.12110	.00800	.03060	.05770	.07300
	GRADIENT	.00004	-.00047	-.03898	.01769	-.00537	.00254	.00009	.00036	-.00165	-.00045

RUN NO. 122/ 0 RN/L = 6.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.906	-11.680	-.12680	.04270	.52030	-.22790	.07510	.12080	.01120	.04270	.07870	.09320
.906	-9.460	-.11380	.03730	.42160	-.18870	.06270	.12930	.01090	.04160	.07630	.09140
.906	-7.140	-.10290	.03400	.31880	-.14640	.04850	.13720	.01030	.03940	.07270	.08730
.906	-4.850	-.10240	.03340	.22210	-.10600	.03420	.14260	.01000	.03830	.06830	.08340
.906	-2.600	-.10250	.03440	.12130	-.05830	.01790	.14630	.00960	.03660	.06320	.07820
.906	-.320	-.11080	.03670	.01180	-.00240	.00280	.14670	.00940	.03580	.05910	.07490
.906	1.940	-.10330	.02920	-.09200	.04970	-.01100	.15380	.00980	.03740	.05490	.07630
.906	4.190	-.10260	.03010	-.18430	.09190	-.02410	.15700	.01000	.03810	.05010	.08180
.906	6.450	-.10990	.03400	-.27720	.13280	-.03730	.15810	.01070	.04070	.04870	.08750
.906	8.750	-.12110	.03980	-.37210	.17320	-.05170	.15980	.01130	.04290	.04800	.09030
.906	10.920	-.13340	.04530	-.46470	.21010	-.06500	.16000	.01170	.04440	.04760	.09180
.906	-.330	-.11350	.03860	.01910	-.00720	.00360	.14510	.00940	.03600	.05910	.07550
	GRADIENT	-.00005	-.00052	-.04536	.02227	-.00643	.00160	.00001	.00002	-.00198	-.00023

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N003) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-1L = .000
ELV-OL = .000 ELV-1R = .000
ELV-OR = .000

RUN NO. 120/ 0 RN/L = 6.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.054	-12.070	-.14360	.07810	.57180	-.24760	.09120	.22220	.01400	.05320	.09080	.10090
1.054	-9.760	-.12740	.06980	.45500	-.20090	.07570	.24090	.01280	.04860	.08780	.09530
1.054	-7.340	-.12380	.07050	.34170	-.15710	.05920	.24910	.01220	.04660	.08680	.09090
1.054	-4.970	-.13320	.08170	.23460	-.11250	.04150	.25080	.01200	.04570	.08580	.08880
1.054	-2.660	-.14170	.08960	.12930	-.06350	.02370	.25440	.01170	.04450	.08420	.08970
1.054	-.310	-.15120	.09810	.01940	-.01110	.00500	.25360	.01120	.04280	.08060	.08790
1.054	1.980	-.14710	.09400	-.08510	.04020	-.01210	.26230	.01170	.04470	.07630	.08750
1.054	4.290	-.14040	.08600	-.18790	.08890	-.02940	.25530	.01240	.04720	.07090	.08980
1.054	6.640	-.13890	.08120	-.29240	.13630	-.04700	.26710	.01300	.04970	.06560	.09240
1.054	9.050	-.13750	.07570	-.39930	.17780	-.06370	.27230	.01310	.05000	.06190	.09270
1.054	11.290	-.15130	.08050	-.50560	.21870	-.07780	.26380	.01390	.05290	.06140	.09660
1.054	-.310	-.14830	.09770	.02090	-.01220	.00530	.24850	.01150	.04390	.08170	.08940
	GRADIENT	-.00086	.00057	-.04574	.02187	-.00767	.00168	.00003	.00014	-.00163	.00003

RUN NO. 121/ 0 RN/L = 6.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.199	-12.350	-.16260	.07020	.57430	-.22990	.09110	.26020	.01300	.04940	.08090	.09720
1.199	-9.940	-.14780	.06550	.44400	-.17770	.07380	.26900	.01300	.04960	.07960	.09240
1.199	-7.460	-.14420	.07020	.32560	-.13250	.05730	.27760	.01270	.04830	.07800	.08620
1.199	-5.040	-.14260	.07360	.21090	-.08480	.03890	.27870	.01230	.04700	.07760	.08500
1.199	-2.690	-.14210	.07460	.11030	-.04460	.02050	.28020	.01180	.04500	.07520	.08430
1.199	-.300	-.15040	.08330	.00560	.00150	.00320	.28290	.01130	.04290	.07210	.08410
1.199	2.010	-.14280	.07540	-.09010	.04410	-.01290	.28570	.01190	.04520	.07020	.08940
1.199	4.360	-.15040	.07900	-.18350	.08050	-.02910	.29020	.01190	.04540	.06470	.09060
1.199	6.780	-.14760	.06940	-.29470	.12730	-.04760	.29090	.01280	.04870	.06170	.09350
1.199	9.220	-.15500	.06950	-.40590	.16780	-.06400	.28810	.01310	.05000	.05940	.09570
1.199	11.570	-.15980	.06420	-.52640	.21280	-.07970	.28240	.01360	.05180	.06060	.09790
1.199	-.300	-.15010	.08180	.00560	.00130	.00300	.28170	.01140	.04350	.07310	.08520
	GRADIENT	-.00074	.00023	-.04170	.01782	-.00703	.00140	.00004	.00015	-.00155	.00103

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (RIN003) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 975.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 134/ 0 RN/L = 6.42 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.458	-12.380	-.14590	.05160	.58510	-.24180	.08810	.26630	.01140	.04330	.05570	.07570
1.458	-10.030	- 13120	.04550	.45950	-.18850	.07100	.27500	.01070	.04070	.06430	.07310
1.458	-7 560	-.12590	.04920	.33810	-.13950	.05430	.28170	.01020	.03880	.06320	.06940
1.458	-5.100	-.12290	05270	.21280	-.08530	.03530	.28320	.00970	.03710	.06220	.06930
1.458	-2.710	-.11860	05210	.11140	-.04440	.01840	.28580	.00970	.03710	.05970	.06450
1.458	-.340	-.11490	.05160	.01570	-.00530	.00390	.28930	.00860	.03270	.05750	.06570
1.458	2 010	-.10940	.04920	-.08110	.03500	-.01010	.29530	.00920	.03490	.05440	.06370
1.458	4.410	-.11270	.05050	-.17770	.07090	-.02640	.29640	.00950	.03630	.05470	.06660
1.458	6.820	-.12240	.05030	-.28400	.11630	-.04350	.29670	.00980	.03750	.05120	.05900
1.458	9.300	-.12400	.04550	-.40530	.16520	-.06070	.29570	.01040	.03950	.04970	.07060
1 458	11 670	-.13700	04780	-.53300	.21550	-.07770	.29460	.01080	.04120	.04870	.07290
1.458	- 320	-.11260	.04950	.01840	-.00850	.00390	.28990	00860	.03200	.05700	.05520
	GRADIENT	.00098	-.00030	-.04066	.01629	-.00626	.00159	.00000	-.00001	-.00076	.00018

RUN NO. 161/ 0 RN/L = 5.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2 740	-11.130	-.11910	.06770	.49130	-.20230	.05950	.25530	.00470	.01780	.02780	.02910
2.740	-8.990	- 11710	.06830	.39800	-.15810	.04730	.25220	.00480	.01820	.02800	.03040
2 740	-6.720	-.11570	05860	.28660	-.11540	.03490	.24970	.00470	.01810	.02780	.03070
2 740	-4.490	-.11520	.05940	.19000	-.07540	.02260	.24840	.00460	.01770	.02770	.03050
2.740	-2 260	- 11480	05870	.10170	-.03970	.01170	24840	.00460	.01780	.02750	.02970
2.740	-.020	-.11170	.05570	.01340	-.00310	.00230	.24860	.00470	.01820	.02660	.02940
2 740	2 180	-.10750	.05420	-.07400	.03280	- 00760	.25090	.00480	.01850	.02420	.03020
2.740	4.400	- 11300	05730	-.15720	.06530	-.01690	.25580	.00470	.01810	.02210	.03030
2 740	6.660	-.11770	.05850	-.25190	.10400	- 02970	.25980	.00470	.01790	.02010	.03210
2.740	8.940	- 12050	05930	-.35250	.14540	-.04230	.26230	.00470	.01810	.01990	.03140
2.740	11.080	- 12590	07020	-.45610	.18750	-.05410	.26620	.00490	.01890	.01990	.03090
2 740	000	-.11280	06820	.01060	-.00080	.00250	.25100	.00480	.01840	.02530	.02980
	GRADIENT	00053	-.00039	-.03916	.01593	-.00442	.00078	.00002	.00007	-.00065	.00000

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N004) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV OR = .000

RUN NO. 124/ 0 RN/L = 4.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.596	-10.890	.46440	-.15110	.41640	-.18000	.08260	.05160	.00810	.03100	.06790	.08250
.596	-8.830	.46980	-.15300	.32730	-.14090	.07020	.05440	.00770	.02930	.06610	.07760
.596	-6.650	.48210	-.16040	.23310	-.09820	.05130	.07030	.00810	.03090	.05410	.06510
.596	-4.540	.46280	-.14330	.15440	-.06560	.03540	.05480	.00730	.02790	.05530	.07270
.596	-2.400	.45930	-.13850	.07430	-.03250	.01840	.07110	.00710	.02700	.06350	.07180
.596	-.270	.45090	-.13460	-.00100	.00030	.00280	.08110	.00690	.02650	.06000	.06390
.596	1.840	.46460	-.14400	-.07410	.03030	-.01300	.08450	.00740	.02810	.05740	.06520
.596	3.960	.47780	-.15590	-.14510	.06030	-.02850	.07990	.00770	.02950	.05690	.07190
.596	6.120	.48410	-.16390	-.22590	.09670	-.04570	.07790	.00790	.03000	.05450	.07310
.596	8.250	.48430	-.17210	-.30920	.13180	-.06150	.06710	.00850	.03250	.05590	.08090
.596	10.270	.49020	-.17460	-.39160	.16590	-.07640	.05460	.00850	.03220	.05560	.08980
.596	-.270	.45970	-.13780	-.00220	.00110	.00260	.07640	.00740	.02810	.05150	.06630
	GRADIENT	.00166	-.00144	-.03519	.01481	-.00750	.00206	.00005	.00020	-.00108	-.00039

RUN NO. 125/ 0 RN/L = 6.25 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.897	-11.710	.56600	-.21040	.49230	-.18990	.08020	.08850	.01090	.04170	.08510	.09010
.897	-9.420	.57460	-.21150	.38920	-.15360	.06710	.09780	.01060	.04070	.08380	.08720
.897	-7.100	.57000	-.20300	.28280	-.11470	.05120	.10500	.01000	.03830	.08120	.08210
.897	-4.800	.56710	-.19710	.18700	-.07860	.03480	.10900	.00980	.03750	.07920	.07810
.897	-2.560	.56210	-.19210	.10020	-.04440	.01830	.11400	.00940	.03600	.07590	.07500
.897	-.260	.56130	-.19410	.00600	-.00450	.00170	.11560	.00900	.03440	.07120	.07140
.897	1.970	.56770	-.19920	-.08600	.03560	-.01510	.12400	.00920	.03510	.06760	.06910
.897	4.220	.56770	-.20030	-.16900	.06750	-.03080	.12570	.00960	.03550	.06500	.07330
.897	6.510	.57630	-.20980	-.26370	.10540	-.04780	.12560	.01020	.03890	.06370	.07840
.897	8.870	.57610	-.21370	-.36380	.14460	-.06380	.11970	.01090	.04150	.06330	.08210
.897	11.040	.58070	-.22350	-.46350	.17970	-.07670	.11690	.01140	.04340	.06260	.08550
.897	-.270	.55700	-.19160	.00980	-.00690	.00200	.11460	.00910	.03470	.07110	.07220
	GRADIENT	.00030	-.00060	-.03980	.01649	-.00729	.00192	-.00003	-.00013	-.00163	-.00069

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N004) (29 AY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 127/ 1 RN/L = 6.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.047	-12.020	.65180	-.25730	.51380	-.19450	.08650	.18990	.01290	.04930	.09110	.09370
1.047	-9.710	.64590	-.24690	.40930	-.16050	.07320	.20380	.01240	.04710	.08880	.09060
1.047	-7.300	.63750	-.23420	.30220	-.12170	.05750	.21140	.01200	.04580	.08800	.08700
1.047	-4.950	.62290	-.21740	.20110	-.08500	.04030	.21500	.01200	.04560	.08890	.08280
1.047	-2.620	.61520	-.21140	.11090	-.05080	.02290	.21570	.01220	.04560	.03980	.07780
1.047	-.270	.60610	-.20500	.00920	-.00710	.00320	.20920	.01240	.04740	.09040	.07730
1.047	2.010	.61500	-.21170	-.09180	.03970	-.01770	.21050	.01230	.04700	.09000	.08040
1.047	4.320	.62650	-.22110	-.17550	.07000	-.03440	.22110	.01200	.04570	.08510	.08020
1.047	6.660	.63570	-.23150	-.27000	.10550	-.05170	.21460	.01280	.04870	.08360	.08580
1.047	9.060	.64630	-.24440	-.37380	.14620	-.06740	.21070	.01330	.05070	.08240	.08970
1.047	11.320	.66600	-.26350	-.47320	.17720	-.08010	.20910	.01340	.05100	.07930	.09020
1.047	-.270	.60780	-.20490	.01160	-.00910	.00360	.20790	.01260	.04810	.09110	.07840
	GRADIENT	.00029	-.00032	-.04126	.01728	-.00820	.00030	.00000	.00003	-.00032	-.00011

RUN NO. 126/ 0 RN/L = 6.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.195	-12.280	.67660	-.27240	.52490	-.18400	.08510	.21330	.01370	.05220	.08670	.09050
1.195	-9.910	.63540	-.25420	.41090	-.14670	.07100	.22860	.01290	.04920	.08430	.08800
1.195	-7.430	.65620	-.24100	.29740	-.10760	.05490	.24020	.01270	.04840	.09140	.08510
1.195	5.010	.64010	-.22770	.19580	-.07340	.03560	.24440	.01260	.04800	.08100	.08140
1.195	-2.640	.63450	-.22100	.09580	-.03520	.01860	.24570	.01210	.04620	.08100	.07690
1.195	-.260	.63240	-.21840	-.00570	.00610	-.00080	.24200	.01190	.04520	.08180	.07500
1.195	2.060	.64190	-.22560	-.10190	.04620	-.02070	.24530	.01190	.04530	.08020	.07720
1.195	4.420	.64340	-.22790	-.19270	.08000	-.03760	.24800	.01200	.04560	.07840	.07970
1.195	6.830	.66900	-.24060	-.29570	.11610	-.05530	.24590	.01270	.04850	.07740	.08420
1.195	9.290	.68780	-.26520	-.40340	.15200	-.07090	.23830	.01340	.05090	.07630	.08760
1.195	11.650	.70470	-.28390	-.51190	.18300	-.08140	.22960	.01380	.05240	.07410	.08870
1.195	-.250	.62810	-.21400	-.00310	.00320	-.00090	.24170	.01180	.04480	.08160	.07500
	GRADIENT	.00154	-.00117	-.04092	.01654	-.00802	.00043	-.00001	-.00007	-.00040	.00045

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N004) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 132/ 0 RN/' = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.456	-12.390	.68380	-.26930	.55390	-.21250	.08220	.23810	.01160	.04400	.06500	.06520
1.456	-9.990	.67610	-.25710	.43350	-.16680	.05680	.25130	.01100	.04190	.06260	.06470
1.456	-7.500	.65390	-.23210	.31530	-.12220	.05200	.26550	.01040	.03960	.06110	.06410
1.456	-5.070	.63500	-.21200	.20540	-.07950	.03710	.27530	.00980	.03750	.05850	.06150
1.456	-2.690	.62550	-.20150	.10430	-.04050	.01970	.27760	.00940	.03590	.05840	.06050
1.456	-.270	.62820	-.20380	.00350	-.00140	.00150	.27670	.00900	.03420	.05810	.06050
1.456	2.080	.63320	-.20370	-.09460	.03780	-.01600	.27770	.00890	.03410	.05590	.06290
1.456	4.470	.64610	-.21620	-.19480	.07730	-.03410	.27830	.00950	.03610	.05540	.06250
1.456	6.900	.67110	-.23990	-.30230	.11830	-.04960	.27570	.01010	.03860	.05480	.06440
1.456	9.380	.69200	-.26160	-.41280	.15790	-.06220	.26540	.01070	.04060	.05460	.06640
1.456	11.730	.70650	-.28030	-.53050	.20240	-.07520	.25490	.01130	.04320	.05560	.06890
1.456	-.290	.63000	-.20280	.00530	-.00270	.00170	.27730	.00890	.03410	.05780	.06070
	GRADIENT	.00280	-.00185	-.04177	.01647	-.00751	.00013	.00001	.00003	-.00047	.00035

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N005) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 75/ 0 RN/L = 5.15 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.595	-11.710	-.86150	.36310	.00580	-.00370	.00100	.09030	.00970	.03690	.06580	.10090
.595	-9.580	-.71500	.30430	.00580	-.00380	.00020	.09540	.00950	.03640	.06250	.09900
.595	-7.320	-.56460	.24550	.00250	-.00180	-.00020	.10070	.00950	.03610	.05950	.09520
.595	-5.160	-.45310	.20020	-.00180	.00150	-.00160	.11110	.00920	.03500	.05720	.08770
.595	-2.940	-.32170	.15070	-.00310	.00080	-.00180	.11360	.00890	.03400	.05850	.08380
.595	-.700	-.20390	.10940	-.00730	.00290	-.00290	.10830	.00900	.03430	.06110	.08320
.595	1.460	-.08380	.06840	-.00740	.00290	-.00330	.10800	.00850	.03250	.05940	.08190
.595	3.690	.04390	.02540	-.01230	.00490	-.00450	.10210	.00860	.03260	.05950	.08050
.595	5.940	.17130	-.01750	-.01190	.00350	-.00470	.09520	.00810	.03100	.05880	.07760
.595	8.180	.29930	-.06180	-.01590	.00280	-.00640	.08390	.00800	.03070	.06220	.07600
.595	10.230	.41360	-.11130	-.02050	.00630	-.00720	.07230	.00790	.03010	.06160	.07450
.595	-.710	-.19940	.10830	-.00960	.00410	-.00290	.11110	.00880	.03350	.06060	.08220
	GRADIENT	.05519	-.01891	-.00126	.00056	-.00039	-.00158	-.00006	-.00027	.00006	-.00049

RUN NO. 74/ 0 RN/L = 6.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.901	-13.310	-1.04970	.44490	-.00640	.00530	-.00050	.12930	.01270	.04820	.06900	.09950
.901	-10.870	-.84390	.35650	-.00590	.00520	-.00120	.13540	.01180	.04490	.06840	.09600
.901	-8.360	-.65790	.27990	-.00860	.00550	-.00240	.14020	.01130	.04290	.06490	.09240
.901	-5.870	-.47490	.20470	-.01190	.00750	-.00300	.14320	.01050	.04010	.06030	.08740
.901	-3.410	-.30840	.13380	-.01430	.00850	-.00370	.14280	.01000	.03830	.05880	.08320
.901	-.980	-.14740	.05660	-.01650	.00790	-.00370	.14090	.01020	.03900	.06130	.08260
.901	1.410	.01160	-.01210	-.02230	.01110	-.00400	.13930	.00980	.03750	.06040	.08090
.901	3.810	.15240	-.06790	-.02750	.01340	-.00450	.13680	.00930	.03550	.06020	.07790
.901	6.260	.28450	-.10170	-.03170	.01530	-.00410	.12870	.00970	.03690	.06520	.08130
.901	8.720	.42220	-.14140	-.03440	.01480	-.00630	.12290	.00940	.03600	.07180	.08020
.901	10.950	.55310	-.19280	-.03810	.01500	-.00810	.11740	.00950	.03610	.07050	.07510
.901	-.970	-.14450	.05880	-.02280	.01150	-.00470	.14570	.00980	.03740	.06040	.07970
	GRADIENT	.06409	-.02802	-.00189	.00074	-.00011	-.00081	-.00010	-.00041	.00014	-.00073

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN005) (29 MAY 75)

REFERENCE DATA

SREF = 2890.0000 SQ. FT XMRP = 978.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 72/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.052	-14.370	-1.23760	.56020	.01600	-.00630	.00240	.23060	.01580	.06000	.08840	.10540
1.052	-11.660	-.97330	.44310	.00950	-.00330	.00060	.23570	.01440	.05470	.09080	.10250
1.052	-8.950	-.74520	.34640	.00450	-.00040	-.00050	.24650	.01310	.04980	.08540	.09560
1.052	-6.350	-.54600	.26390	-.00270	.00460	-.00230	.25010	.01250	.04760	.08130	.09150
1.052	-3.760	-.35890	.19250	-.00650	.00710	-.00290	.25410	.01180	.04480	.07900	.08760
1.052	-1.210	-.19760	.12530	-.00950	.00790	-.00320	.25400	.01120	.04280	.07850	.08670
1.052	1.270	-.03410	.04980	-.01020	.00780	-.00390	.25260	.01110	.04240	.07590	.08480
1.052	3.740	.13230	-.02850	-.01480	.01000	-.00460	.24400	.01140	.04330	.07810	.08410
1.052	6.310	.29770	-.09090	-.01650	.00900	-.00470	.23330	.01160	.04440	.08150	.08400
1.052	8.840	.45020	-.14840	-.02090	.01000	-.00510	.22480	.01160	.04420	.08560	.07960
1.052	11.130	.57860	-.19820	-.02030	.00590	-.00510	.22030	.01180	.04400	.08620	.07380
1.052	-1.170	-.18940	.12590	-.01000	.00730	-.00340	.24730	.01180	.04490	.08140	.08890
	GRADIENT	.08674	-.02955	-.00102	.00034	-.00023	-.00126	-.00005	-.00020	-.00021	-.00050

RUN NO. 73/ 0 RN/L = 8.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.202	-15.070	-1.29130	.53880	-.00100	.00000	.00130	.24320	.01560	.05930	.08360	.09710
1.202	-12.230	-1.00970	.42090	-.00550	.00490	.00010	.26410	.01420	.05420	.08320	.09160
1.202	-9.360	-.75720	.31900	-.00850	.00640	-.00160	.26420	.01360	.05190	.08230	.09050
1.202	-6.800	-.53170	.22790	-.01100	.00730	-.00300	.26960	.01270	.04840	.07880	.08920
1.202	-3.900	-.33350	.14890	-.01330	.00850	-.00370	.27390	.01200	.04580	.07630	.08800
1.202	-1.250	-.14460	.07490	-.01700	.01100	-.00410	.27860	.01140	.04330	.07510	.08560
1.202	1.310	.01790	.00960	-.01790	.01030	-.00490	.27430	.01130	.04320	.07350	.08500
1.202	3.830	.17580	-.05870	-.02030	.01050	-.00560	.26940	.01130	.04310	.07510	.08290
1.202	6.420	.33820	-.11990	-.02150	.01040	-.00500	.26010	.01140	.04340	.07780	.08180
1.202	8.980	.49490	-.18260	-.02490	.01120	-.00640	.25150	.01150	.04370	.08010	.07770
1.202	11.390	.63250	-.22460	-.02860	.01140	-.00760	.24120	.01150	.04390	.08160	.07560
1.202	-1.200	-.13510	.07040	-.01640	.00970	-.00420	.27530	.01170	.04460	.07680	.08780
	GRADIENT	.06568	-.02673	-.00085	.00021	-.00025	-.00068	-.00009	-.00032	-.00020	-.00062

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN005) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 136/ 0 RN/L = 6.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.461	-14.880	-1.23720	.51510	-.00350	.00270	.00240	.29690	.01130	.04310	.05920	.07290
1.461	-12.090	-.97110	.39780	-.00760	.00490	.00130	.29530	.01090	.04140	.06040	.06750
1.461	-9.240	-.72300	.29120	-.00770	.00480	.00060	.29490	.01030	.03930	.05830	.06620
1.461	-6.470	-.50760	.20550	-.01430	.00680	-.00070	.29330	.00960	.03660	.05600	.06550
1.461	-3.790	-.30970	.12440	-.01170	.00570	-.00120	.29420	.00910	.03480	.05250	.06360
1.461	-1.110	-.12950	.05630	-.01600	.00850	-.00200	.29470	.00900	.03450	.05140	.06340
1.461	1.490	.03270	-.00190	-.01970	.01030	-.00310	.29340	.00910	.03470	.05120	.06420
1.461	4.020	.17660	-.05630	-.02090	.01020	-.00410	.28950	.00910	.03480	.05290	.06490
1.461	6.570	.32560	-.11120	-.02320	.01120	-.00500	.28690	.00890	.03400	.05440	.06410
1.461	9.150	.47620	-.16740	-.02380	.01060	-.00530	.28040	.00890	.03400	.05460	.06330
1.461	11.660	.62620	-.20880	-.02730	.01040	-.00580	.27250	.00900	.03430	.05650	.06340
1.451	-1.040	-.12180	.05400	-.01620	.00850	-.00210	.29520	.00900	.03440	.05160	.06[illegible]
	GRADIENT	.06231	-.02307	-.00121	.00059	-.00038	-.00059	.00000	.00001	.00004	.000[illegible]8

RUN NO. 159/ 0 RN/L = 5.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.150	-.74580	.29390	.00020	.00080	.00070	.28690	.00390	.01510	.02540	.03110
2.740	-9.950	-.61430	.24120	-.00190	.00260	.00050	.27870	.00380	.01450	.02610	.03150
2.740	-7.600	-.48510	.19280	-.00230	.00310	-.00010	.26740	.00410	.01560	.02620	.03310
2.740	-5.270	-.35510	.14410	-.00700	.00590	-.00110	.25840	.00430	.01660	.02570	.03320
2.740	-2.980	-.23520	.10150	-.00390	[illegible]	.00020	.25270	.00450	.01720	.02520	.03200
2.740	-.690	-.12870	.06890	-.00720	.00520	-.00060	.24950	.00450	.01730	.02550	.03000
2.740	1.560	-.03260	.04090	-.00670	.00460	-.00080	.24680	.00460	.01750	.02560	.02920
2.740	3.820	.07220	.00040	-.00940	.00550	-.00150	.24330	.00450	.01740	.02510	.02840
2.740	6.120	.18520	-.03880	-.00820	.00430	-.00140	.23910	.00460	.01760	.02440	.02750
2.740	8.430	.30240	-.08140	-.00860	.00320	-.00150	.23630	.00470	.01780	.02440	.02660
2.740	10.620	.42460	-.12730	-.01180	.00430	-.00240	.23320	.00460	.01750	.02490	.02560
2.740	-.640	-.11330	.06250	-.00680	.00500	-.00070	.25080	.00450	.01740	.02540	.02950
	GRADIENT	.04496	-.01463	-.00071	.00025	-.00025	-.00137	.00000	.00004	-.00001	-.00051

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N006) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = 5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 76/ 0 RN/L = 5.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.599	-11.690	-.81270	.32350	.00470	-.00190	.00920	.09170	.00990	.03770	.06920	.09770
.599	-9.550	-.66580	.25680	.00110	-.00090	.00770	.09780	.00970	.03680	.06520	.09520
.599	-7.300	-.52340	.21070	.00210	-.00130	.00750	.10320	.00940	.03590	.06160	.09130
.599	-5.140	-.41270	.16660	-.00460	.00200	.00580	.11260	.00930	.03530	.05930	.08450
.599	-2.920	-.28300	.11830	-.00780	.00370	.00490	.11230	.00920	.03510	.06050	.08190
.599	-.690	-.15960	.07410	-.01430	.00700	.00370	.11160	.00930	.03420	.06120	.07990
.599	1.490	-.03800	.03020	-.01860	.00860	.00290	.10760	.00870	.03310	.05980	.07880
.599	3.730	.09590	-.01740	-.01940	.00820	.00200	.10310	.00870	.03310	.05980	.07740
.599	5.980	.22330	-.05890	-.02230	.00950	.00200	.09580	.00850	.03230	.05970	.07540
.599	8.240	.35920	-.10790	-.02400	.00980	.00190	.08510	.00810	.03110	.06060	.07320
.599	10.290	.47660	-.15940	-.02650	.01020	.00130	.07250	.00820	.03130	.06240	.07320
.599	-.680	-.15450	.07090	-.00990	.00440	.00460	.11020	.00900	.03420	.06100	.07990
	GRADIENT	.05700	-.02038	-.00177	.00068	-.00043	-.00143	-.00008	-.00032	-.00016	-.00066

RUN NO. 77/ 0 RN/L = 6.56 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.904	-13.320	-1.01970	.41230	-.00860	.00630	.00760	.12920	.01290	.04920	.07420	.09980
.904	-10.860	-.80620	.32190	-.00710	.00640	.00690	.13700	.01190	.04540	.07270	.09430
.904	-8.300	-.60750	.23760	-.01240	.00870	.00540	.14210	.01120	.04280	.06840	.09090
.904	-5.820	-.42910	.16540	-.01520	.01030	.00430	.14480	.01040	.03970	.06200	.08530
.904	-3.350	-.26730	.09860	-.02190	.01420	.00260	.14370	.01030	.03920	.06220	.08320
.904	-.920	-.10530	.02400	-.02580	.01590	.00050	.15000	.00960	.03650	.05990	.07670
.904	1.460	.04770	-.04070	-.02840	.01710	-.00110	.13890	.00990	.03780	.06040	.07980
.904	3.850	.18230	-.09180	-.03080	.01720	-.00120	.13620	.00960	.03680	.06130	.07810
.904	6.320	.31180	-.12150	-.03230	.01600	-.00110	.12990	.00970	.03710	.06480	.08020
.904	8.770	.45480	-.16710	-.02960	.01230	-.00130	.12780	.00960	.03650	.07130	.07910
.904	11.000	.58450	-.21880	-.02880	.01010	-.00130	.12150	.00970	.03700	.07040	.07430
.904	-.920	-.09940	.01930	-.02320	.01440	.00100	.14480	.01010	.03840	.06050	.07960
	GRADIENT	.06263	-.02653	-.00122	.00043	-.00054	-.00140	-.00008	-.00025	-.00009	-.00051

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N006) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = 5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 79/ 0 RN/L = 6.82 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.048	-14.200	-1.17020	.50890	.01440	-.00510	.00990	.22050	.01540	.05860	.09150	.10320
1.048	-11.560	-.91910	.39830	.01020	-.00400	.00840	.23370	.01380	.05250	.09240	.09830
1.048	-8.860	-.69670	.30480	.00670	-.00280	.00740	.24320	.01270	.04820	.08790	.09290
1.048	-6.260	-.50150	.22680	.00220	-.00130	.00580	.24910	01210	.04600	.08340	.08830
1.048	-3.680	-.32710	.15800	-.00170	.00100	.00510	.25330	.01130	.04310	.07990	.08440
1.048	-1.110	-.16050	.09400	-.00700	.00330	.00400	.24780	.01120	.04260	.08150	.08470
1.048	1.320	.00000	.02080	-.00880	.00430	.00340	.24530	.01130	.04320	.07870	.08420
1.048	3.790	.15580	-.04950	-.01140	.00490	.00250	.23770	.01170	.04450	.07970	.08300
1.048	6.360	.32150	-.11180	-.01340	.00500	.00020	.23510	.01120	.04260	.07910	.08040
1.048	8.880	.46490	-.16000	-.01740	.00560	-.00090	.22200	.01150	.04390	.08490	.07810
1.048	11.150	.59020	-.20770	-.01630	.00190	.00000	.21460	.01180	.04490	.08640	.07450
1.048	-1.110	-.15750	.09500	-.00570	.00230	.00440	.24600	.01140	.04330	.08210	.08550
	GRADIENT	.06478	-.02799	-.00125	.00051	-.00034	-.00199	.00005	.00019	-.00013	-.00019

RUN NO. 78/ 0 RN/L = 7.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.199	-15.000	-1.26850	.51810	.00620	-.00650	.00870	.24000	.01610	.06120	.08770	.09990
1.199	-12.190	-.98970	.40230	.00050	-.00180	.00750	.25640	.01500	.05690	.08910	.09550
1.199	-9.300	-.73340	.29910	-.00250	.00020	.00520	.26220	.01390	.05310	.08610	.09200
1.199	-6.560	-.51100	.21020	-.00340	.00040	.00440	.26690	.01310	.05000	.08280	.09070
1.199	-3.870	-.31060	.12980	-.00840	.00280	.00290	.27380	.01230	.04680	.07990	.08900
1.199	-1.180	-.12360	.05740	-.01210	.00550	.00210	.27830	.01180	.04490	.07750	.08670
1.199	1.330	.03560	-.00620	-.01460	.00550	.00060	.27520	.01150	.04390	.07[illegible]	.08480
1.199	3.840	.18750	-.07020	-.01640	.00570	.00000	.27030	.01150	.04380	.07820	.08300
1.199	6.480	.35390	-.13300	-.01580	.00430	-.00080	.26250	.01150	.04370	.07870	.08150
1.199	9.020	.50850	-.19450	-.01830	.00390	-.00140	.25160	.01180	.04510	.08160	.07820
1.199	11.420	.64570	-.23600	-.02440	.00660	-.00300	.24250	.01170	.04480	.08220	.07580
1.199	-1.150	-.11680	.05600	-.01150	.00470	.00220	.27780	.01180	.04510	.07770	.08660
	GRADIENT	.06452	-.02589	-.00104	.00034	-.00040	-.00052	-.00011	-.00039	-.00052	-.00078

MSFC THT 622 (1A125) LAUNCH VEHICLE, 74 OTS (RIN006) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = 5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 137/ 0 RN/L = 6.42 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.464	-14.850	-1.21970	.50040	-.00070	.00090	.00730	.29360	.01160	.04410	.05930	.07180
1.464	-12.070	-.95510	.38340	-.00390	.00170	.00600	.29550	.01110	.04240	.06070	.06660
1.464	-9.230	-.70760	.27610	-.00490	.00170	.00510	.29540	.01040	.03970	.05900	.05650
1.464	-6.450	-.49110	.19120	-.01080	.00310	.00330	.29510	.00960	.03660	.05650	.06490
1.464	-3.760	-.29950	.11600	-.00710	.00030	.00220	.29260	.00930	.03540	.05520	.06400
1.464	-1.100	-.12020	.04820	-.01280	.00430	.00120	.29490	.00920	.03500	.05350	.05310
1.464	1.500	.04390	-.01150	-.01600	.00570	.00010	.29470	.00920	.03510	.05290	.06360
1.464	4.030	.18880	-.06610	-.01730	.00560	-.00060	.29120	.00920	.03500	.05450	.06470
1.464	6.580	.33700	-.12160	-.02000	.00710	-.00170	.28800	.00900	.03430	.05590	.06400
1.464	9.160	.48760	-.17780	-.02110	.00680	-.00210	.28160	.00890	.03410	.05700	.06270
1.464	11.660	.63550	-.21810	-.02550	.00760	-.00290	.27500	.00900	.03410	.05800	.06210
1.464	-1.040	-.11080	.04550	-.01160	.00370	.00150	.29520	.00920	.03490	.05360	.06330
	GRADIENT	.06275	-.02334	-.00131	.00067	-.00037	-.00016	-.00001	-.00004	-.00011	.00010

RUN NO. 158/ 0 RN/L = 5.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.140	-.73880	.28830	.00030	.00070	.00250	.28820	.00400	.01540	.02520	.03100
2.740	-9.940	-.61060	.23770	-.00050	.00120	.00190	.27920	.00370	.01430	.02600	.03160
2.740	-7.590	-.47940	.18860	-.00160	.00240	.00160	.26860	.00410	.01570	.02610	.03310
2.740	-5.290	-.35110	.14040	-.00270	.00270	.00100	.25920	.00430	.01660	.02560	.03320
2.740	-2.980	-.23350	.09930	-.00530	.00410	.00060	.25260	.00450	.01720	.02520	.03200
2.740	-.680	-.12290	.06470	-.00730	.00450	.00030	.25100	.00450	.01730	.02540	.03000
2.740	1.570	-.02680	.03620	-.00610	.00360	.00030	.24700	.00460	.01740	.02540	.02920
2.740	3.840	.07950	-.00390	-.00880	.00460	.00020	.24390	.00450	.01730	.02500	.02840
2.740	6.120	.18810	-.04170	-.00680	.00310	.00020	.24090	.00460	.01750	.02450	.02730
2.740	8.440	.30820	-.08610	-.00740	.00070	.00000	.23750	.00470	.01780	.02480	.02530
2.740	10.620	.43280	-.13400	-.00760	.00000	-.00080	.23440	.00460	.01740	.02550	.02530
2.740	-.630	-.10750	.05880	-.00610	.00440	.00060	.25150	.00450	.01730	.02530	.02940
	GRADIENT	.04558	-.01489	-.00041	.00003	-.00005	-.00132	.00000	.00002	-.00003	-.00051

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N007) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 83/ 0 RN/L = 5.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.595	-11.660	-.79400	.31140	.00860	-.00480	.01230	.08910	.00960	.03640	.06940	.09940
.595	-9.530	-.64780	.25350	.00960	-.00540	.01170	.09580	.00930	.03550	.06570	.09640
.595	-7.300	-.50730	.19790	.00860	-.00470	.01090	.10350	.00920	.03500	.06230	.09270
.595	-5.110	-.39400	.15370	.00160	-.00130	.00940	.11300	.00890	.03410	.05930	.08510
.595	-2.910	-.27020	.10720	-.00580	.00200	.00820	.11420	.00880	.03370	.05970	.08210
.595	-.670	-.14100	.06100	-.00910	.00380	.00780	.11420	.00850	.03260	.06020	.07950
.595	1.520	-.01310	.01410	-.01050	.00420	.00810	.10980	.00850	.03220	.05970	.07950
.595	3.740	.10900	-.02870	-.01390	.00580	.00780	.10750	.00830	.03150	.05820	.07700
.595	5.990	.23980	-.07200	-.01700	.00660	.00770	.09840	.00820	.03120	.05830	.07550
.595	8.230	.37390	-.11980	-.02190	.00850	.00650	.08900	.00780	.02980	.05910	.07300
.595	10.290	.49200	-.17270	-.02460	.00880	.00640	.07640	.00780	.02980	.06000	.07250
.595	-.680	-.13890	.05960	-.01240	.00570	.00730	.11380	.00860	.03290	.06060	.07960
	GRADIENT	.05716	-.02053	-.00116	.00053	-.00004	-.00111	-.00007	-.00032	-.00023	-.00069

RUN NO. 82/ 0 RN/L = 6.58 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.906	-13.310	-.99970	.40100	-.00560	.00410	.01070	.13360	.01260	.04790	.07440	.09820
.906	-10.840	-.79420	.31490	-.00660	.00510	.00940	.13840	.01180	.04480	.07350	.09520
.906	-8.320	-.60360	.23560	-.00990	.00690	.00740	.14390	.01120	.04260	.06910	.09140
.906	-5.810	-.42090	.16030	-.01100	.00730	.00650	.14780	.01020	.03870	.06200	.08440
.906	-3.370	-.26340	.09520	-.01810	.01160	.00440	.14590	.00990	.03780	.06140	.08170
.906	-.950	-.10290	.02100	-.02420	.01460	.00220	.14590	.00980	.03730	.06130	.07920
.906	1.460	.05180	-.04580	-.02690	.01550	.00170	.14350	.00960	.03650	.06040	.07900
.906	3.860	.19530	-.10320	-.03170	.01720	.00140	.13940	.00940	.03590	.05100	.07750
.906	6.280	.32030	-.13160	-.02760	.01230	.00250	.13440	.00970	.03680	.06450	.08020
.906	8.740	.46030	-.17490	-.03080	.01160	.00170	.13120	.00940	.03600	.06990	.07940
	GRADIENT	.06352	-.02747	-.00181	.00073	-.00039	-.00091	-.00007	-.00027	-.00009	-.00053

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N007) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 80/ 0 RN/L = 6.85 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.049	-14.270	-1.16750	.50220	.01710	-.00760	.01340	.22940	.01500	.05700	.09100	.10130
1.049	-11.530	-.90450	.38570	.01140	-.00570	.01140	.23420	.01390	.05290	.09410	.09840
1.049	-8.860	-.68470	.29650	.00770	-.00470	.00990	.24520	.01260	.04800	.08870	.09280
1.049	-6.240	-.49200	.21980	.00480	-.00390	.00900	.25180	.01200	.04580	.08450	.08810
1.049	-3.680	-.31640	.14960	.00020	-.00180	.00810	.25590	.01140	.04330	.08120	.08410
1.049	-1.130	-.15200	.08650	-.00380	.00000	.00720	.25540	.01080	.04130	.08040	.08280
1.049	1.330	.01140	.01130	-.00570	.00090	.00640	.25090	.01100	.04190	.07740	.08250
1.049	3.800	.16650	-.05810	-.00970	.00200	.00510	.24350	.01130	.04310	.07840	.08080
1.049	6.340	.32650	-.11670	-.01260	.00310	.00340	.23310	.01170	.04460	.08080	.08210
1.049	8.910	.48260	-.17340	-.01520	.00400	.00190	.23020	.01100	.04200	.08240	.07440
1.049	11.170	.60070	-.21610	-.01460	.00060	.00250	.22140	.01150	.04350	.08400	.07160
1.049	-1.100	-.14830	.08610	-.00410	-.00010	.00730	.24660	.01160	.04410	.08370	.08630
	GRADIENT	.06474	-.02804	-.00115	.00049	-.00039	-.00167	-.00000	-.00000	-.00046	-.00041

RUN NO. 81/ 0 RN/L = 8.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.200	-15.060	-1.27720	.52140	.00560	-.00630	.01090	.24260	.01620	.06180	.08900	.10120
1.200	-12.220	-.99110	.40070	.00050	-.00130	.00960	.26190	.01490	.05670	.08970	.09510
1.200	-9.320	-.72780	.29510	-.00030	-.00130	.00810	.26950	.01380	.05240	.08560	.09060
1.200	-6.570	-.51040	.20900	-.00220	-.00040	.00700	.27300	.01310	.04990	.08290	.09050
1.200	-3.880	-.30810	.12620	-.00660	.00160	.00520	.27690	.01240	.04740	.08130	.09010
1.200	-1.210	-.12170	.05450	-.01150	.00450	.00430	.28250	.01180	.04510	.07810	.08740
1.200	1.320	.03640	-.00820	-.01340	.00440	.00270	.27880	.01170	.04440	.07660	.08580
1.200	3.840	.19140	-.07410	-.01490	.00410	.00200	.27320	.01170	.04470	.07750	.08440
1.200	6.450	.35740	-.13730	-.01520	.00380	.00060	.26580	.01170	.04440	.07920	.08300
1.200	9.020	.50660	-.19270	-.01770	.00400	.00000	.26180	.01130	.04300	.07920	.07600
1.200	11.420	.64940	-.23920	-.02330	.00590	-.00130	.24630	.01190	.04520	.08240	.07600
1.200	-1.180	-.11120	.04900	-.01130	.00390	.00420	.28200	.01200	.04560	.07850	.08780
	GRADIENT	.06451	-.02583	-.00105	.00029	-.00044	-.00057	-.00009	-.00035	-.00051	-.00073

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N007) (29 MAY 75)

REFERENCE DATA

SREF = 2890.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 139/ 0 RN/L = 6.42 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.459	-14.820	-1.21030	.49130	.00050	.00020	.00940	.29380	.01200	.04560	.05990	.07170
1.459	-12.070	-.94810	.37610	-.00420	.00120	.00820	.29560	.01110	.04240	.06100	.06740
1.459	-9.210	-.69990	.27130	-.00270	-.00090	.00680	.29610	.01040	.03960	.05900	.06650
1.459	-6.430	-.48780	.18880	-.00760	-.00060	.00500	29550	.00970	.03710	.05860	.06560
1.459	-3.750	-.29280	.11110	-.00620	-.00130	.00390	.29570	.00930	.03540	.05630	.06390
1.459	-1.090	-.11360	.04330	-.01140	.00220	.00290	.29720	.00920	.03520	.05460	.06360
1.459	1.520	.05140	-.01630	-.01430	.00340	.00190	.29650	.00930	.03530	.05380	.06390
1.459	4.040	.19240	-.06910	-.01450	.00280	.00110	.29190	.00920	.03520	.05510	.06480
1.459	6.600	.34540	-.12640	-.01680	.00420	.00010	.28930	.00900	.03440	.05640	.06380
1.459	9.190	.49790	-.18330	-.01850	.00430	-.00010	.28260	.00890	.03400	.05690	.06220
1.459	11.670	.64150	-.22280	-.02320	.00540	-.00100	.27790	.00890	.03380	.05770	.06140
1.459	-1.010	-.10230	.03880	-.01170	.00210	.00280	.29640	.00930	.03550	.05460	.06350
	GRADIENT	.06241	-.02311	-.00108	.00052	-.00036	-.00046	-.00001	-.00002	-.00017	.00011

RUN NO. 157/ 0 RN/L = 5.11 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.140	-.73710	.28660	-.00030	.00090	.00280	.28080	.00390	.01490	.02530	.03100
2.740	-9.940	-.60850	.23670	-.00110	.00200	.00260	.28030	.00370	.01420	.02610	.03180
2.740	-7.610	-.47500	.18470	-.00300	.00260	.00140	.26850	.00410	.01560	.02620	.03300
2.740	-5.260	-.34960	.13970	-.00140	.00110	.00210	.26010	.00430	.01650	.02580	.03310
2.740	-2.980	-.23070	.09730	-.00390	.00240	.00130	.25430	.00440	.01690	.02530	.03190
2.740	-.690	-.12290	.06410	-.00660	.00360	.00080	.25160	.00450	.01720	.02540	.02990
2.740	1.570	-.02670	.03590	-.00610	.00330	.00090	.24820	.00450	.01720	.02550	.02910
2.740	3.830	.07920	-.00360	-.00600	.00260	.00100	.24490	.00460	.01760	.02530	.02830
2.740	6.120	.19240	-.04480	-.00620	.00170	.00100	.24220	.00460	.01750	.02480	.02720
2.740	8.440	.31090	-.08860	-.00470	-.00190	.00140	.23920	.00460	.01780	.02510	.02600
2.740	10.630	.43590	-.13590	-.00780	-.00040	.00070	.23620	.00450	.01740	.02580	.02500
2.740	-.620	-.10450	.05670	-.00760	.00460	.00060	.25240	.00450	.01730	.02540	.02940
	GRADIENT	.04522	-.01458	-.00025	.00001	-.00004	-.00139	.00003	.00009	.00000	-.00051

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N009) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 5.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 91/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.598	-11.660	-.78550	.30650	-.00810	.00840	.00650	.09490	.00940	.03600	.06660	.09120
.598	-9.520	-.63790	.24810	-.00890	.00900	.00610	.10540	.00870	.03320	.06090	.08660
.598	-7.290	-.50050	.19490	-.01190	.01080	.00470	.10990	.00880	.03370	.05800	.08440
.598	-5.110	-.38980	.15040	-.01750	.01460	.00360	.11510	.00880	.03350	.05640	.07900
.598	-2.900	-.25990	.10120	-.02180	.01600	.00260	.11800	.00850	.03290	.05650	.07620
.598	-.660	-.13760	.05790	-.02540	.01550	.00240	.11510	.00870	.03310	.05920	.07570
.598	1.520	-.01240	.01260	-.02430	.01660	.00260	.11250	.00840	.03200	.05720	.07520
.598	3.740	.10910	-.02670	-.03140	.01930	.00110	.10870	.00830	.03160	.05570	.07260
.598	5.970	.23710	-.06990	-.03240	.01810	.00070	.09910	.00820	.03130	.05710	.07170
.598	8.220	.36530	-.11460	-.03080	.01630	.00140	.08990	.00770	.02950	.05870	.06870
.598	10.290	.49120	-.17100	-.03570	.01890	.00070	.07740	.00780	.02980	.05930	.06880
.598	- 660	-.13740	.05720	-.02300	.01620	.00280	.11550	.00850	.03270	.05600	.07490
	GRADIENT	.05575	-.01941	-.00126	.00045	-.00019	-.00138	-.00005	-.00021	-.00015	-.00051

RUN NO. 90/ 0 RN/L = 6.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.898	-13.250	-.98440	.39180	-.01750	.01720	.00540	.12670	.01280	.04860	.07300	.09720
.898	-10.800	-.78390	.30680	-.02080	.01890	.00410	.13540	.01180	.04510	.07140	.09170
.898	-8.280	-.59410	.22880	-.02720	.02270	.00210	.14220	.01110	[illegible]4240	.06700	.08630
.898	-5.790	-.41710	.15760	-.02870	.02340	.00090	.14520	.0100[illegible]	[illegible]030	.06220	.08240
.898	-3.350	-.26090	.09270	-.03200	.02520	.00020	.14020	.010[illegible]	[illegible]970	.06210	.08190
.898	-.940	-.09630	.01400	-.03350	.02530	-.00070	.14490	.0099[illegible]	[illegible]3790	.05890	.07680
.898	1.470	.05650	-.04900	-.03580	.02610	-.00150	.14230	.00970	.03690	.05850	.07590
.898	3.860	.18530	-.09280	-.04040	.02710	-.00310	[illegible]	.00950	.03640	.05980	.07590
.898	6.300	.32270	-.12900	-.04310	.02690	-.00280	.13040	.00960	.03670	.06380	.07830
.898	8.750	.45460	-.16850	-.04540	.02570	-.00360	.12500	.00950	.03640	.07130	.07690
.898	11.010	.59160	-.22400	-.03870	.01920	-.00330	.12490	.00980	.03[illegible]	[illegible]960	.07290
.898	-.900	-.09250	.01270	-.03430	.02580	-.00090	.14590	.00990	.03[illegible]	[illegible]0	.07590
	GRADIENT	.06204	-.02578	-.00114	.00027	-.00044	-.00037	-.00016	-.0[illegible]	[illegible]	-.00079

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 7% OTS (R1N008) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 5.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 88/ 0 RN/L = 6.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.049	-14.170	-1.15060	.49560	-.00310	.01000	.00660	.21710	.01800	.06080	.09360	.10530
1.049	-11.510	-.89750	.38460	-.00560	.01040	.00570	.23300	.01390	.05310	.09150	.09800
1.049	-8.850	-.68500	.29670	-.00800	.01070	.00460	.24050	.01330	.05080	.08850	.09360
1.049	-6.210	-.48610	.21750	-.01160	.01210	.00330	.24770	.01270	.04830	.08410	.08690
1.049	-3.660	-.31330	.14920	-.01500	.01380	.00250	.25190	.01200	.04560	.08040	.08300
1.049	-1.120	-.14560	.08340	-.01740	.01410	.00200	.25040	.01160	.04400	.08020	.08173
1.049	1.350	.01[illegible]	.01030	-.01830	.01400	.00150	.24660	.01190	.04520	.07840	.08173
1.049	3.820	.17[illegible]	-.06070	-.02350	.01610	.00030	.23770	.01240	.04720	.08020	.08033
1.049	6.350	.33[illegible]	-.11930	-.02380	.01430	-.00040	.22560	.01280	.04880	.08400	.08223
1.049	8.900	.48470	-.17590	-.02630	.01420	-.00130	.22500	.01210	.04590	.08460	.07350
1.049	11.200	.60600	-.21910	-.02950	.01410	-.00210	.21650	.01250	.04740	.08470	.07240
1.049	-1.080	-.14210	.08360	-.01840	.01440	.00200	.24640	.01210	.04590	.08210	.08340
	GRADIENT	.05464	-.02821	-.00106	.00027	-.00028	-.00186	.00006	.00024	-.00010	-.00033

RUN NO. 89/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.198	-15.000	-1.25240	.51050	-.01100	.00970	.00590	.25420	.01580	.06010	.08870	.10000
1.198	-12.160	-.97190	.39020	-.01290	.01170	.00510	.25570	.01480	.05620	.08890	.09410
1.198	-9.290	-.72070	.28930	-.01210	.01050	.00380	.25630	.01420	.05420	.08690	.09300
1.198	-6.540	-.49750	.19930	-.01610	.01270	.00220	.26250	.01350	.05130	.08280	.09170
1.198	-3.850	-.30060	.12150	-.01900	.01380	.00120	.26920	.01280	.04890	.07950	.08940
1.198	-1.200	-.11370	.04850	-.02340	.01590	.00020	.27440	.01230	.04690	.07710	.08670
1.198	1.360	.05010	-.01750	-.02290	.01410	.00000	.27130	.01230	.04680	.07640	.08530
1.198	3.870	.20340	-.08230	-.02430	.01350	-.00060	.26680	.01230	.04700	.07790	.08310
1.198	6.470	.36820	-.14420	-.02620	.01370	-.00190	.25930	.01220	.04630	.07980	.08080
1.198	9.020	.51610	-.19970	-.02810	.01390	-.00260	.25360	.01200	.04560	.08050	.07540
1.198	11.440	.65940	-.24590	-.03320	.01560	-.00380	.23990	.01250	.04750	.08320	.07560
1.198	-1.140	-.[illegible]0340	.04630	-.02160	.01530	.00080	.27720	.01210	.04630	.07640	.08530
	GRADIENT	.06518	-.02634	-.00060	-.00009	-.00022	-.00039	-.00006	-.00023	-.00022	-.00079

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 DTS (R1N008) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 5.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 140/ 0 RN/L = 6.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.462	-14.830	-1.21780	.49860	-.00340	.00380	.00590	.29140	.01170	.04440	.06090	.07260
1.462	-12.080	-.97230	.38280	-.00660	.00460	.00450	.22670	.02810	.10690	.06240	.06910
1.462	-9.210	-.70840	.27700	-.00780	.00380	.00330	.29330	.00990	.03780	.06210	.06770
1.462	-6.430	-.49290	.19210	-.01340	.00590	.00200	.29250	.00960	.03550	.05910	.06560
1.462	-3.740	-.29500	.11300	-.00970	.00370	.00150	.29280	.00950	.03620	.05500	.06430
1.462	-1.070	-.11780	.04630	-.01490	.00730	.00030	.29330	.00960	.03550	.05310	.06370
1.462	1.500	.04360	-.01180	-.01820	.00850	-.00070	.29430	.00940	.03580	.05210	.06380
1.462	4.040	.18970	-.06690	-.01990	.00880	-.00180	.29120	.00930	.03540	.05410	.06430
1.462	6.590	.33950	-.12240	-.02170	.00990	-.00260	.28890	.00910	.03460	.05550	.06350
1.462	9.200	.48990	-.17790	-.02140	.00850	-.00290	.29040	.00910	.03480	.05660	.06260
1.462	11.670	.63780	-.21910	-.02620	.00970	-.00350	.29470	.00910	.03490	.05760	.06180
1.462	-1.050	-.11010	.04380	-.01460	.00700	.00060	.29430	.00940	.03590	.05330	.06400
	GRADIENT	.06237	-.02307	-.00131	.00064	-.00042	-.00014	-.00003	-.00012	-.00015	.00000

RUN NO. 156/ 0 RN/L = 5.11 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.140	-.73880	.28730	.00040	.00070	.00270	.28920	.00390	.01510	.02560	.03110
2.740	-9.950	-.61320	.24030	-.00200	.00200	.00180	.27550	.00420	.01600	.02610	.03230
2.740	-7.610	-.47690	.18690	-.00080	.00220	.00170	.25670	.00420	.01620	.02850	.03260
2.740	-5.260	-.34820	.13890	-.00280	.00270	.00140	.25950	.00440	.01670	.02630	.03240
2.740	-2.980	-.23080	.09760	-.00450	.00350	.00100	.25410	.00450	.01710	.02600	.03130
2.740	-.670	-.12600	.06650	-.00710	.00510	.00010	.25190	.00460	.01770	.02560	.02933
2.740	1.570	-.02580	.03640	-.00820	.00510	-.00010	.24830	.00460	.01770	.02560	.02833
2.740	3.840	.08030	-.00380	-.00660	.00350	.00020	.24490	.00460	.01780	.02510	.02730
2.740	6.140	.19210	-.04470	-.00750	.00330	.00000	.24040	.00470	.01800	.02470	.02620
2.740	8.460	.30790	-.08560	-.00730	.00160	-.00020	.23840	.00470	.01820	.02500	.02530
2.740	10.620	.42980	-.13200	-.01110	.00320	-.00130	.23470	.00460	.01770	.02460	.02450
2.740	-.610	-.10910	.05930	-.00680	.00480	.00040	.25270	.00460	.01760	.02540	.02870
	GRADIENT	.04548	-.01472	-.00033	.00000	.00012	-.00137	.00001	.00009	-.00012	-.00057

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N00^) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 978.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 5.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 84/ 0 RN/L = 5.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.594	-11.610	-.75670	.28230	-.00890	.00940	.01210	.09000	.00970	.03700	.06970	.09730
.594	-9.480	-.61380	.22460	-.00730	.00840	.01170	.09620	.00930	.03560	.06580	.09390
.594	-7.250	-.47100	.16880	-.00860	.00860	.01140	.10430	.00910	.03480	.06210	.08920
.594	-5.090	-.36370	.12700	-.01540	.01240	.00960	.11300	.00910	.03470	.06010	.08310
.594	-2.870	-.22990	.07640	-.01980	.01470	.00880	.11640	.00890	.03390	.05890	.07930
.594	-.630	-.10360	.03120	-.02850	.01890	.00760	.11610	.00850	.03240	.05820	.07640
.594	1.550	.02240	-.01560	-.02970	.01910	.00750	.11200	.00830	.03180	.05760	.07640
.594	3.770	.14940	-.05870	-.03380	.02020	.00750	.10660	.00850	.03220	.05750	.07470
.594	6.020	.27370	-.10060	-.03650	.02060	.00720	.09080	.00930	.03170	.05770	.07270
.594	8.270	.41130	-.15120	-.04050	.02130	.00640	.08840	.00800	.03040	.05910	.07050
.594	10.320	.53070	-.20410	-.04000	.02050	.00710	.07700	.00790	.03000	.05910	.06950
.594	-.630	-.10220	.03[illegible]40	-.02410	.01710	.00810	.11670	.00850	.03240	.05860	.07650
	GRADIENT	.05719	-.02046	-.00196	.00076	-.00018	-.00151	-.00006	-.00026	-.00022	-.00063

RUN NO. 85/ 0 RN/L = 6.59 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CRL	CAF	CNBO	CABO	CABS	CABE
.900	-13.220	-.96180	.37260	-.02050	.01680	.01030	.13210	.01270	.04840	.07490	.09720
.900	-10.770	-.76010	.28810	-.02480	.01870	.00850	.13780	.01180	.04490	.07330	.09400
.900	-8.270	-.57700	.21300	-.02980	.02120	.00660	.14250	.01110	.04240	.06910	.08980
.900	-5.780	-.40300	.14400	-.03220	.02210	.00530	.14280	.01080	.04110	.06460	.08660
.900	-3.320	-.23890	.07590	-.03830	.02530	.00340	.14470	.01020	.03890	.06150	.08150
.900	-.910	-.08200	.00290	-.03860	.02370	.00250	.14910	.00980	.03750	.06040	.07810
.900	1.490	.07770	-.06670	-.04020	.02400	.00330	.14680	.00970	.03690	.05950	.07800
.900	3.880	.21620	-.12080	-.04460	.02620	.00290	.14050	.00970	.03700	.06060	.07730
.900	6.330	.35150	-.15550	-.04340	.02390	.00350	.13580	.00970	.03690	.06320	.07850
.900	8.790	.48230	-.19160	-.04310	.02200	.00250	.13130	.00920	.03530	.06850	.07640
.900	11.030	.61410	-.24310	-.03830	.01660	.00220	.12820	.00970	.03710	.06770	.07480
.900	-.890	-.07700	.00090	-.04060	.02520	.00250	.15000	[illegible]	.03740	.06010	.07760
	GRADIENT	.06354	-.02749	-.00085	.00012	-.00003	-.00062	-.00007	-.00026	-.00015	-.00053

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N009) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 5.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 87/ 0 RN/L = 6.91 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.047	-14.180	-1.13840	.47950	.00400	.00330	.01370	.22770	.01550	.05890	.09270	.10210
1.047	-11.540	-.88670	.37140	.00120	.00330	.01200	.24330	.01340	.05110	.09150	.09600
1.047	-8.810	-.66130	.27830	-.00170	.00400	.01110	.24480	.01310	.05000	.09010	.09400
1.047	-6.200	-.46890	.20150	-.00470	.00440	.00980	.24880	.01250	.04770	.08590	.08910
1.047	-3.650	-.29660	.13370	-.00880	.00630	.00910	.25350	.01190	.04540	.08230	.08590
1.047	-1.060	-.12700	.06730	-.01080	.00620	.00900	.25120	.01170	.04460	.08220	.08500
1.047	1.360	.03060	-.00440	-.01320	.00730	.00790	.24700	.01210	.04600	.07990	.08410
1.047	3.830	.18670	-.07480	-.01580	.00820	.00700	.23910	.01260	.04790	.08120	.08260
1.047	6.400	.35320	-.13890	-.01790	.00750	.00550	.23840	.01190	.04530	.07940	.07900
1.047	8.920	.49780	-.18820	-.02190	.00860	.00430	.22370	.01250	.04750	.08480	.07570
1.047	11.210	.62480	-.23640	-.02570	.01050	.00450	.22000	.01270	.04850	.08260	.07480
1.047	-1.060	-.12500	.06770	-.01320	.00750	.00940	.24700	.01210	.04620	.08370	.08650
	GRADIENT	.05467	-.02803	-.00094	.00027	-.00030	-.00190	.00010	.00035	-.00022	-.00043

RUN NO. 86/ 0 RN/L = 7.03 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.200	-14.970	-1.24230	.49690	-.00320	.00100	.01150	.24240	.01560	.05950	.08980	.10000
1.200	-12.150	-.95970	.37810	-.00630	.00480	.01070	.26140	.01460	.05550	.09000	.09390
1.200	-9.290	-.70470	.27520	-.00950	.00620	.00860	.26560	.01390	.05280	.08730	.09210
1.200	-6.520	-.48240	.18600	-.01010	.00500	.00780	.27050	.01310	.04990	.08300	.09130
1.200	-3.830	-.28360	.10720	-.01510	.00960	.00510	.27510	.01250	.04770	.08020	.08970
1.200	-1.190	-.10110	.03740	-.01700	.00930	.00550	.28250	.01200	.04590	.07690	.08590
1.200	1.370	.06260	-.02810	-.01860	.00840	.00440	.27960	.01190	.04520	.07620	.08390
1.200	3.890	.21640	-.09320	-.02100	.00880	.00340	.27300	.01190	.04550	.07750	.08220
1.200	6.490	.37780	-.15350	-.02240	.00860	.00220	.26430	.01190	.04530	.07900	.08100
1.200	9.050	.53040	-.21220	-.02340	.00820	.00150	.25870	.01180	.04490	.08010	.07540
1.200	11.460	.67090	-.25560	-.02810	.00950	.00060	.24560	.01220	.04660	.08250	.07550
1.200	-1.130	-.09040	.03380	-.01830	.00980	.00520	.28120	.01220	.04640	.07770	.08660
	GRADIENT	.06470	-.02592	-.00075	-.00001	-.00036	-.00034	-.00007	-.00029	-.00035	-.00095

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN009) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 5.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 139/ 0 RN/L = 6.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.458	-14.800	-1.20040	.48350	.00060	.00030	.00980	.29010	.01180	.04490	.06140	.07180
1.458	-12.070	-.94170	.37050	-.00490	.00210	.00850	.29430	.01050	.04020	.06250	.06980
1.458	-9.200	-.69710	.26790	-.00400	-.00040	.00720	.29520	.01000	.03830	.06240	.06840
1.458	-6.420	-.48080	.18240	-.01030	.00130	.00540	.29490	.00970	.03700	.05950	.06610
1.458	-3.740	-.28650	.10480	-.00740	-.00030	.00470	.29470	.00960	.03660	.05690	.06450
1.458	-1.060	-.10630	.03660	-.01220	.00300	.00380	.29730	.00950	.03620	.05480	.06380
1.458	1.520	.05780	-.02210	-.01550	.00450	.00260	.29710	.00950	.03630	.05340	.06360
1.458	4.060	.20260	-.07680	-.01490	.00310	.00220	.29310	.00940	.03580	.05540	.06440
1.458	6.610	.35350	-.13290	-.01720	.00460	.00120	.28970	.00920	.03520	.05710	.06340
1.458	9.200	.50490	-.18980	-.01930	.00500	.00060	.28360	.00910	.03470	.05700	.06180
1.458	11.680	.64800	-.22830	-.02360	.00560	-.00030	.27900	.00910	.03490	.05800	.06130
1.458	-1.030	-.09790	.03420	-.01110	.00180	.00420	.29720	.00950	.03630	.05480	.06400
	GRADIENT	.06282	-.02324	-.00100	.00046	-.00034	-.00019	-.00002	-.00009	-.00023	-.00002

RUN NO. 155/ 0 RN/L = 5.13 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.140	-.73860	.28870	.00090	-.00020	.00370	.28940	.00390	.01510	.02560	.03110
2.740	-9.940	-.61100	.23920	.00060	-.00040	.00340	.28010	.00420	.01600	.02590	.03220
2.740	-7.610	-.47860	.18830	.00040	.00060	.00300	.27030	.00420	.01590	.02650	.03250
2.740	-5.260	-.34830	.13930	-.00150	.00090	.00220	.26080	.00440	.01670	.02650	.03230
2.740	-2.980	-.23080	.09710	-.00320	.00180	.00210	.25420	.00450	.01710	.02620	.03120
2.740	-.660	-.12160	.06390	-.00590	.00320	.00150	.25190	.00460	.01750	.02580	.02920
2.740	1.570	-.02560	.03560	-.00400	.00160	.00170	.24940	.00460	.01760	.02580	.02820
2.740	3.830	.07910	-.00250	-.00600	.00220	.00150	.24670	.00460	.01770	.02550	.02720
2.740	6.120	.19200	-.04500	-.00550	.00080	.00160	.24280	.00470	.01790	.02520	.02610
2.740	8.460	.31180	-.08930	-.00110	-.00440	.00280	.24000	.00470	.01810	.02570	.02500
2.740	10.630	.43560	-.13660	-.00640	-.00180	.00150	.23790	.00460	.01770	.02550	.02410
2.740	-.630	-.10630	.05800	-.00480	.00260	.00170	.25360	.00460	.01760	.02580	.02860
	GRADIENT	.04527	-.01458	-.00029	-.00002	-.00007	-.00110	.00001	.00008	-.00009	-.00057

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N010) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 99/ 0 RN/L = 4.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.598	-11.560	-.78440	.31280	-.00830	.00860	.00300	.09910	.00830	.03170	.05910	.09320
.598	-9.410	-.64560	.25830	-.00930	.00920	.00220	.10740	.00820	.03110	.05620	.08980
.598	-7.170	-.50490	.20300	-.01230	.01160	.00100	.11540	.00770	.02960	.05130	.08510
.598	-5.010	-.39350	.15800	-.01700	.01390	.00040	.12240	.00780	.02990	.05030	.07990
.598	-2.800	-.27140	.11280	-.01690	.01310	.00070	.12710	.00750	.02870	.05010	.07580
.598	-.590	-.14940	.06860	-.02230	.01500	-.00110	.12400	.00740	.02820	.05080	.07370
.598	1.610	-.03150	.02770	-.02270	.01430	-.00150	.11900	.00740	.02830	.05090	.07500
.598	3.830	.09530	-.01610	-.02840	.01720	-.00220	.11580	.00730	.02770	.04990	.07170
.598	6.050	.21800	-.05590	-.03020	.01650	-.00330	.10830	.00720	.02730	.05050	.06990
.598	8.300	.34560	-.10000	-.02990	.01550	-.00290	.09550	.00700	.02670	.05410	.06910
.598	10.370	.46290	-.15200	-.03130	.01570	-.00370	.08510	.00680	.02590	.05340	.06710
.598	-.580	-.14350	.05490	-.02220	.01580	-.00090	.12530	.00740	.02830	.05070	.07380
	GRADIENT	.05528	-.01936	-.00158	.00053	-.00041	-.00176	-.00003	-.00013	-.00002	-.00050

RUN NO. 98/ 0 RN/L = 6.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.900	-13.210	-1.00830	.41020	-.02360	.02040	.00100	.13160	.01260	.04800	.07040	.09910
.900	-10.730	-.80160	.32290	-.02470	.02140	.00000	.13690	.01170	.04440	.06920	.09520
.900	-8.190	-.60890	.24280	-.02800	.02310	-.00170	.14300	.01090	.04140	.06510	.09030
.900	-5.670	-.42960	.16840	-.03320	.02600	-.00280	.14120	.01050	.03990	.06080	.08660
.900	-3.260	-.27010	.10220	-.03410	.02540	-.00310	.14260	.00990	.03760	.05830	.08240
.900	-.860	-.11120	.02770	-.03560	.02540	-.00360	.14370	.00980	.03720	.05880	.08140
.900	1.550	.04310	-.03890	-.03970	.02710	-.00400	.13930	.00980	.03720	.05880	.08180
.900	3.950	.18090	-.09120	-.04370	.02880	-.00320	.13700	.00950	.03610	.05910	.07930
.900	6.410	.31950	-.12960	-.04260	.02640	-.00440	.13170	.00960	.03670	.06320	.08090
.900	8.830	.45030	-.16260	-.04320	.02470	-.00490	.12220	.00950	.03620	.07040	.08040
.900	11.100	.58380	-.21700	-.04510	.02320	-.00610	.12210	.00960	.03640	.06870	.07630
.900	-.800	-.10580	.02700	-.03180	.02310	-.00330	.14260	.01000	.03830	.06100	.08300
	GRADIENT	.06270	-.02591	-.00137	.00050	-.00003	-.00088	-.00005	-.00019	.00010	-.00037

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N010) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 96/ 0 RN/L = 6.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.048	-14.110	-1.17610	.51210	-.00710	.01190	.00270	.21620	.01550	.05900	.09080	.10280
1.048	-11.460	-.92010	.40140	-.00940	.01310	.00130	.24070	.01340	.05090	.08920	.09670
1.048	-8.750	-.69710	.30960	-.01270	.01460	.00070	.24430	.01300	.04940	.08750	.09360
1.048	-6.140	-.50430	.23170	-.01550	.01540	-.00030	.24930	.01250	.04760	.08310	.08980
1.048	-3.600	-.33240	.16330	-.01830	.01670	-.00080	.25340	.01200	.04560	.07920	.08580
1.048	-1.060	-.16500	.09780	-.02120	.01710	-.00160	.25030	.01180	.04450	.07960	.08530
1.048	1.410	-.00750	.02690	-.02270	.01730	-.00200	.24520	.01210	.04600	.07760	.08530
1.048	3.890	.15450	-.04790	-.02470	.01750	-.00250	.23820	.01240	.04740	.07930	.08390
1.048	6.450	.32840	-.11770	-.02500	.01580	-.00230	.23730	.01170	.04480	.07940	.08050
1.048	8.970	.47290	-.16710	-.02740	.01550	-.00210	.22300	.01220	.04640	.08460	.07890
1.048	11.270	.59770	-.21320	-.03340	.01930	-.00300	.21530	.01280	.04890	.08460	.07740
1.048	-1.010	-.16250	.09910	-.02010	.01640	-.00090	.24620	.01220	.04650	.08150	.08710
	GRADIENT	.06489	-.02824	-.00083	.00010	-.00022	-.00203	.00005	.00026	-.00007	-.00023

RUN NO. 97/ 0 RN/L = 6.55 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.197	-14.960	-1.28500	.52610	-.01300	.01150	.00290	.23560	.01520	.05780	.08730	.10000
1.197	-12.130	-.99970	.40660	-.01460	.01380	.00210	.25650	.01430	.05440	.08740	.09370
1.197	-9.220	-.73840	.30030	-.01730	.01520	.00010	.26370	.01380	.05250	.08550	.09250
1.197	-6.460	-.51280	.20940	-.01890	.01570	-.00060	.26700	.01300	.04970	.08170	.09220
1.197	-3.780	-.31280	.12940	-.02230	.01710	-.00180	.27300	.01240	.04720	.07670	.08980
1.197	-1.110	-.12810	.05810	-.02410	.01830	-.00190	.27810	.01220	.04650	.07480	.08740
1.197	1.420	.03460	-.00690	-.02360	.01580	-.00210	.27460	.01210	.04610	.07420	.08600
1.197	3.940	.18940	-.07370	-.02650	.01650	-.00300	.26930	.01190	.04550	.07560	.08350
1.197	6.540	.36120	-.14[illegible]	-.02700	.01510	-.00320	.26030	.01200	.04580	.07820	.08340
1.197	9.090	.50920	-.19760	-.02630	.01320	-.00320	.25460	.01180	.04510	.07990	.07720
1.197	11.530	.65570	-.24530	-.03530	.01830	-.00470	.24300	.01220	.04630	.08210	.07600
1.197	-1.080	-.11870	.05380	-.02490	.01810	-.00250	.27700	.01230	.04700	.07560	.08800
	GRADIENT	.06500	-.02625	-.00047	-.00017	-.00015	-.00056	-.00006	-.00021	-.00016	-.00079

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N21C) : 29 MAY 75 :

REFERENCE DATA

SREF = 2890.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-1L = 10.000
ELV-OL = -5.000 ELV-1R = .000
ELV-OR = .000

RUN NO. 142/ 0 RN/L = 6.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.460	-14.860	-1.21810	.49850	-.00760	.00660	.00390	.29530	.01120	.04270	.06330	.07300
1.460	-12.090	-.95750	.38450	-.00990	.00660	.00290	.29450	.01030	.03930	.06410	.07030
1.460	-9.230	-.70940	.27900	-.00950	.00600	.00210	.29410	.01000	.03810	.06260	.06870
1.460	-6.430	-.49070	.19130	-.01550	.00900	.00100	.29340	.00980	.03740	.05900	.06610
1.460	-3.740	-.29420	.11270	-.01330	.00730	.00050	.29420	.00970	.03710	.05430	.06450
1.460	-1.090	-.11600	.04490	-.01900	.01080	-.00050	.29640	.00970	.03590	.05240	.06350
1.460	1.510	.04630	-.01330	-.02140	.01140	-.00160	.29530	.00960	.03660	.05190	.05340
1.460	4.040	.19220	-.06660	-.02120	.01030	-.00210	.29210	.00940	.03580	.05390	.06350
1.460	6.600	.34310	-.12450	-.02300	.01120	-.00300	.29000	.00930	.03550	.05540	.06290
1.460	9.180	.49230	-.17960	-.02420	.01070	-.00350	.28390	.00920	.03490	.05580	.06150
1.460	11.690	.64320	-.22170	-.02760	.01090	-.00420	.27660	.00920	.03510	.05720	.06110
1.460	-1.010	-.10650	.04220	-.01740	.00990	-.00010	.29530	.00960	.03660	.05250	.06350
	GRADIENT	.06253	-.02322	-.00101	.00037	-.00034	-.00028	-.00004	-.00016	-.00007	-.00011

RUN NO. 151/ 0 RN/L = 5.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.140	-.74440	.29530	.00070	.00040	.00160	.28940	.00390	.01480	.02580	.03100
2.740	-9.950	-.61770	.24350	-.00200	.00210	.00120	.27950	.00430	.01630	.02590	.03160
2.740	-7.620	-.48260	.19090	-.00080	.00190	.00120	.27070	.00420	.01610	.02650	.03190
2.740	-5.290	-.35280	.14250	-.00210	.00210	.00090	.26070	.00440	.01690	.02660	.03180
2.740	-2.980	-.23100	.09700	-.00450	.00350	.00060	.25480	.00450	.01730	.02520	.03070
2.740	-.690	-.12770	.06780	-.00570	.00450	.00050	.25300	.00460	.01770	.02560	.02870
2.740	1.570	-.02870	.03760	-.00520	.00360	.00040	.24920	.00470	.01800	.02570	.02750
2.740	3.830	.07721	.00220	-.00660	.00330	-.00020	.24530	.00470	.01810	.02550	.02560
2.740	6.120	.18770	-.04100	-.00820	.00410	-.00040	.24130	.00480	.01820	.02490	.02560
2.740	8.430	.30500	-.08420	-.00860	.00280	-.00070	.23840	.00480	.01840	.02510	.02450
2.740	10.830	.42950	-.13030	-.01030	.00360	-.00130	.23500	.00470	.01790	.02450	.02390
2.740	-.630	-.11070	.06160	-.00610	.00450	.00020	.25310	.00470	.01790	.02550	.02810
	GRADIENT	.04511	-.01444	-.00026	-.00007	-.00011	-.00142	.00003	.00012	-.00009	-.00059

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N011) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 92/ 0 RN/L = 5.03 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.602	-11.690	-.77650	.29680	-.01940	.01690	.00570	.09550	.00980	.03750	.06760	.08920
.602	-9.520	-.62450	.23710	-.02070	.01730	.00510	.10400	.00920	.03500	.06270	.08580
.602	-7.300	-.49260	.18500	-.02160	.01780	.00390	.10860	.00910	.03480	.05950	.08400
.602	-5.130	-.37730	.14010	-.02410	.02020	.00320	.11630	.00900	.03440	.05730	.07860
.602	-2.890	-.24810	.09140	-.02840	.02170	.00250	.11550	.00890	.03390	.05770	.07650
.602	-.670	-.12140	.04590	-.03290	.02340	.00170	.11820	.00870	.03210	.05750	.07350
.602	1.530	-.00120	.00350	-.03520	.02430	.00160	.11360	.00840	.03220	.05640	.07310
.602	3.760	.12500	-.03840	-.03930	.02530	.00040	.10990	.00850	.03240	.05620	.07160
.602	6.000	.25460	-.08280	-.03990	.02450	.00010	.10220	.00800	.03070	.05600	.06790
.602	8.250	.38490	-.12810	-.04210	.02360	-.00080	.08860	.00810	.03090	.05950	.06840
.602	10.310	.50090	-.18030	-.04450	.02480	-.00120	.07820	.00770	.02960	.05880	.05650
.602	-.670	-.12160	.04570	-.03180	.02320	.00160	.11760	.00860	.03290	.05740	.07340
	GRADIENT	.05596	-.01949	-.00158	.00053	-.00029	-.00097	-.00007	-.00024	-.00025	-.00068

RUN NO. 93/ 0 RN/L = 6.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.902	-13.250	-.98060	.38660	-.02350	.02060	.00550	.12880	.01270	.04840	.07300	.09640
.902	-10.800	-.77720	.30100	-.02550	.02190	.00390	.13790	.01180	.04500	.07150	.09120
.902	-8.290	-.59100	.22560	-.02890	.02360	.00220	.14490	.01110	.04220	.06740	.08550
.902	-5.790	-.41700	.15710	-.03480	.02700	.00040	.14680	.01060	.04050	.06230	.08240
.902	-3.360	-.26020	.09390	-.03460	.02630	.00000	.14720	.01030	.03920	.06100	.07940
.902	-.950	-.10090	.01890	-.03960	.02900	-.00150	.14700	.01030	.03930	.06140	.07820
.902	1.470	.05560	-.04890	-.04000	.02820	-.00280	.14440	.00960	.03650	.05850	.07550
.902	3.860	.19280	-.10010	-.04210	.02800	-.00320	.14220	.00960	.03680	.06020	.07560
.902	6.310	.32300	-.13270	-.03980	.02430	-.00150	.13660	.00980	.03730	.06460	.07740
.902	8.750	.45630	-.17740	-.04010	.02300	-.00200	.12950	.00970	.03690	.07040	.07650
.902	11.020	.59660	-.22890	-.04090	.02030	-.00310	.13020	.00970	.03690	.06750	.07160
.902	-.900	-.09250	.01310	-.03940	.02830	-.00150	.14640	.01010	.03840	.05980	.07690
	GRADIENT	.06294	-.02699	-.00095	.00022	-.00045	-.00073	-.00012	-.00042	-.00022	-.00059

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N011) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-1L = 10.000
ELV-0L = .000 ELV-1R = .000
ELV-0R = .000

RUN NO. 95/ 1 RN/L = 6.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.047	-14.090	-1.15910	.49680	-.00680	.01080	.00640	.21190	.01530	.05810	.09160	.10250
1.047	-11.460	-.90760	.38910	-.00640	.01030	.00580	.24020	.01340	.05090	.09000	.09730
1.047	-8.720	-.68570	.29830	-.00870	.01100	.00500	.24480	.01310	.05000	.08880	.09380
1.047	-6.110	-.49290	.22220	-.01170	.01170	.00400	.25060	.01260	.04800	.08400	.08880
1.047	-3.590	-.32420	.15530	-.01550	.01390	.00290	.25470	.01210	.04620	.08020	.08580
1.047	-1.050	-.15530	.08910	-.01950	.01540	.00190	.25230	.01190	.04530	.07980	.08460
1.047	1.420	.00280	.01720	-.02040	.01510	.00140	.24820	.01230	.04670	.07780	.08420
1.047	3.900	.16370	-.05550	-.02300	.01560	.00060	.23960	.01270	.04840	.07980	.08280
1.047	6.470	.33350	-.12210	-.02250	.01310	-.00020	.23630	.01220	.04660	.08020	.08140
1.047	8.980	.47730	-.17030	-.02480	.01290	-.00090	.22550	.01230	.04700	.08470	.07780
1.047	11.270	.60180	-.21660	-.02930	.01510	-.00090	.21820	.01300	.04960	.08420	.07570
1.047	-1.000	-.14990	.08770	-.01780	.01400	.00230	.24720	.01240	.04720	.08210	.08710
	GRADIENT	.06503	-.02835	-.00094	.00019	-.00030	-.00198	.00009	.00032	-.00013	-.00038

RUN NO. 94/ 0 RN/L = 8.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.196	-14.850	-1.24470	.50190	-.00950	.00820	.00660	.22440	.01470	.05600	.08600	.09570
1.196	-12.020	-.96300	.38470	-.00930	.00870	.00620	.25130	.01430	.05460	.08900	.09420
1.196	-9.140	-.70740	.28230	-.01270	.01130	.00440	.26450	.01320	.05040	.08350	.08970
1.196	-6.400	-.48940	.19580	-.01560	.01290	.00270	.26720	.01270	.04850	.08080	.08940
1.196	-3.740	-.29420	.11750	-.01900	.01440	.00140	.27290	.01220	.04650	.07750	.08730
1.196	-1.060	-.10760	.04490	-.01950	.01330	.00120	.27860	.01210	.04630	.07570	.08560
1.196	1.460	.05070	-.01800	-.02200	.01310	.00030	.27350	.01210	.04610	.07540	.08520
1.196	3.980	.20820	-.08600	-.02430	.01360	-.00040	.26850	.01190	.04530	.07650	.08210
1.196	6.570	.37240	-.14720	-.02390	.01160	-.00080	.26000	.01200	.04570	07890	.08200
1.196	9.120	.52110	-.20520	-.02510	.01100	-.00200	.25580	.01170	.04470	.07990	.07450
1.196	11.550	.66010	-.24760	-.03310	.01570	-.00370	.24380	.01210	.04620	.08190	.07470
1.196	-1.040	-.10070	.04320	-.02070	.01420	.00080	.27840	.01220	.04640	.07600	.08600
	GRADIENT	.06488	-.02623	-.00071	-.00010	-.00024	-.00070	-.00003	-.00015	-.00013	-.00062

MSFC TWT 622 (IA125) LAUNCH VEHICLE. 74 OTS (R1N011) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 141/ 0 RN/L = 6.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.465	-14.820	-1.20840	.49060	-.00560	.00470	.00650	.29510	.01110	.04220	.06330	.07300
1.465	-12.070	-.94720	.37640	-.00940	.00560	.00510	.29380	.01040	.03960	.06410	.07030
1.465	-9.180	-.70000	.27430	-.00850	.00430	.00400	.29280	.01000	.03820	.06210	.06870
1.465	-6.420	-.48400	.18660	-.01530	.00730	.00280	.29360	.00990	.03770	.05910	.06610
1.465	-3.750	-.29340	.11030	-.01090	.00520	.00260	.29320	.00980	.03740	.05530	.06450
1.465	-1.090	-.11320	.04200	-.01660	.00870	.00120	.29620	.00970	.03680	.05320	.06340
1.465	1.520	.05290	-.01830	-.01860	.00880	.00020	.29580	.00960	.03650	.05250	.06300
1.465	4.050	.19620	-.07180	-.01990	.00840	-.00080	.29330	.00940	.03570	.05470	.06310
1.465	6.590	.34400	-.12680	-.02260	.00980	-.00170	.28950	.00930	.03560	.05590	.06280
1.465	9.180	.49650	-.18350	-.02330	.00950	-.00240	.28350	.00920	.03520	.05630	.06140
1.465	11.660	.63970	-.22270	-.02710	.00960	-.00290	.27770	.00920	.03520	.05730	.06090
1.465	-1.030	-.10270	.03870	-.01600	.00810	.00130	.29671	.00960	.03680	.05320	.06340
	GRADIENT	.06288	-.02333	-.00112	.00038	-.00043	.00000	-.00005	-.00021	-.00010	-.00018

RUN NO. 153/ 0 RN/L = 5.13 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.140	-.73870	.28840	.00090	-.00020	.00260	.28930	.00390	.01490	.02560	.03110
2.740	-9.940	-.60780	.23680	-.00060	.00090	.00240	.28020	.00430	.01630	.02580	.03160
2.740	-7.610	-.47960	.18850	-.00090	.00160	.00210	.27020	.00420	.01600	.02640	.03180
2.740	-5.290	-.34960	.13880	-.00210	.00140	.00130	.26060	.00440	.01690	.02650	.03180
2.740	-2.980	-.22950	.09630	-.00380	.00270	.00120	.25600	.00450	.01730	.02600	.03060
2.740	-.680	-.12080	.05270	-.00360	.00230	.00100	.25290	.00460	.01770	.02550	.02860
2.740	1.570	-.02440	.03450	-.00530	.00300	.00090	.24990	.00470	.01800	.02560	.02750
2.740	3.830	.07870	-.00380	-.00590	.00260	.00030	.24640	.00470	.01800	.02550	.02650
2.740	6.120	.19050	-.04360	-.00610	.00250	.00040	.24270	.00480	.01820	.02490	.02550
2.740	8.440	.31040	-.08750	-.00450	-.00050	.00090	.23910	.00480	.01830	.02520	.02460
2.740	10.620	.43090	-.13340	-.01030	.00250	-.00160	.23510	.00470	.01790	[illegible]	.02380
2.740	-.630	-.10650	.05730	-.00540	.00320	.00080	.25410	.00470	.01780	[illegible]	.02810
	GRADIENT	.04503	-.01448	-.00035	.00002	-.00012	-.00140	.00003	.00011	-.00006	-.00059

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N012) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-1L = 10.000
ELV-0L = 10.000 ELV-1R = .000
ELV-0R = .000

RUN NO. 100/ 0 RN/L = 4.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.600	-11.530	-.73090	.27040	-.01190	.01060	.01210	.09650	.00850	.03230	.06310	.09450
.600	-9.380	-.59070	.21520	-.01510	.01180	.01130	.10560	.00810	.03080	.05970	.08970
.600	-7.130	-.44790	.15930	-.01620	.01190	.01070	.11590	.00760	.02910	.05510	.08310
.600	-4.970	-.34090	.11670	-.01980	.01450	.00970	.12270	.00770	.02940	.05370	.07820
.600	-2.760	-.21920	.07150	-.02160	.01630	.00930	.12710	.00750	.02840	.05270	.07430
.600	-.540	-.09020	.02280	-.02270	.01620	.00910	.12600	.00720	.02770	.05190	.07150
.600	1.660	.03420	-.02320	-.02720	.01830	.00850	.12210	.00720	.02760	.05110	.07170
.600	3.860	.15510	-.06390	-.03000	.01830	.00850	.11890	.00720	.02750	.05030	.06950
.600	6.120	.28290	-.10890	-.03390	.01920	.00810	.11170	.00690	.02650	.05030	.06720
.600	8.370	.41350	-.15640	-.03350	.01760	.00890	.09730	.00590	.02620	.05250	.06640
.600	10.420	.53330	-.20780	-.03950	.02040	.00760	.09090	.00670	.02540	.05180	.06410
.600	-.500	-.09230	.02540	-.02390	.01690	.00920	.12810	.00730	.02770	.05220	.07150
	GRADIENT	.05630	-.02061	-.00118	.00043	-.00014	-.00057	-.00006	-.00021	-.00038	-.00090

RUN NO. 101/ 0 RN/L = 6.26 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.899	-13.160	-.97050	.37710	-.02080	.01600	.01100	.12930	.01260	.04790	.07520	.10220
.899	-10.700	-.76800	.29370	-.02350	.01860	.00910	.13630	.01170	.04450	.07320	.09680
.899	-8.120	-.57270	.21280	-.02780	.02040	.00660	.13860	.01100	.04180	.06850	.09150
.899	-5.640	-.39910	.14290	-.03120	.02210	.00530	.14140	.01050	.04000	.06360	.08710
.899	-3.220	-.23930	.07680	-.03280	.02250	.00450	.14630	.00920	.03530	.06140	.08360
.899	-.800	-.08030	.00230	-.03130	.02050	.00430	.14300	.01020	.03880	.06210	.08340
.899	1.600	.08380	-.07120	-.03210	.02020	.00390	.14090	.01000	.03820	.06090	.08200
.899	4.000	.21940	-.12070	-.03740	.02220	.00470	.13750	.00990	.03790	.06090	.08060
.899	6.440	.35830	-.15940	-.03660	.02090	.00430	.13290	.01000	.03800	.06340	.08100
.899	8.880	.48490	-.19310	-.03780	.01900	.00420	.13340	.00940	.03570	.06670	.07850
.899	11.130	.61860	-.24710	-.03400	.01500	.00350	.12370	.00990	.03790	.06610	.07670
.899	-.760	-.07300	-.00130	-.02760	.01770	.00450	.14480	.01010	.03860	.06170	.08260
	GRADIENT	.0[illegible]02	-.02768	-.00061	-.00005	.00001	-.00118	.00008	.00030	-.00011	-.00043

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN012) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 103/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.047	-14.030	-1.12320	.47030	-.09490	.00780	.01280	.22580	.01510	.05750	.09220	.10280
1.047	-11.390	-.87260	.36250	-.00520	.00770	.01110	.24190	.01350	.05150	.09120	.09700
1.047	-8.700	-.65690	.27440	-.00520	.00640	.01070	.25230	.01260	.04800	.08690	.09150
1.047	-6.08[illegible]	-.47110	.20370	-.00850	.00720	.00970	.25180	.01240	.04710	.08410	.08960
1.047	-3.560	-.29980	.13510	-.01250	.00900	.00890	.25460	.01190	.04530	.08020	.08600
1.047	-1.000	-.13330	.07010	-.01550	.00960	.00820	.25280	.01160	.04430	.07980	.08430
1.047	1.440	.02160	-.00010	-.01740	.01000	.00720	.24640	.01210	.04620	.07760	.08400
1.047	3.910	[illegible]	-.07070	-.01960	.01060	.00640	.23700	.01290	.04900	.07980	.08400
1.047	6.460	.34680	-.13670	-.02150	.00990	.00500	.23890	.01190	.04540	.07740	.07940
1.047	8.980	.48990	-.18480	-.02380	.01000	.00420	.22610	.01240	.04710	.08230	.07830
1.047	11.270	.61420	-.23200	-.03030	.01420	.00380	.21870	.01320	.05010	.08120	.07780
1.047	-.960	-.13220	.07160	-.01530	.00920	.00820	.24650	.01220	.04660	.08230	.08730
	GRADIENT	.06399	-.02766	-.00093	.00021	-.00034	-.00238	.00014	.00052	-.00014	-.00026

RUN NO. 102/ 0 RN/L = 6.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.199	-14.860	-1.23030	.48830	-.00730	.00400	.01150	.23570	.01480	.05630	.08760	.09740
1.199	-12.010	-.94590	.36940	-.00750	.00580	.01050	.26190	.01380	.05260	.08730	.09110
1.199	-9.120	-.68990	.26600	-.00930	.00590	.00910	.26470	.01330	.05070	.08500	.09020
1.199	-6.380	-.47160	.17940	-.01280	.00760	.00770	.26860	.01250	.04770	.08090	.08950
1.199	-3.700	-.27100	.09800	-.01630	.00880	.00630	.27490	.01190	.04540	.07800	.08750
1.199	-1.040	-.09000	.02930	-.01910	.01040	.00530	.28120	.01160	.04410	.07500	.08390
1.199	1.490	.07060	-.03450	-.01870	.00830	.00480	.27660	.01150	.04380	.07490	.08280
1.199	4.000	.22180	-.09900	-.02160	.00860	.00380	.26940	.01170	.04450	.07670	.08150
1.199	6.580	.38550	-.16040	-.02060	.00630	.00300	.26280	.01170	.04450	.07770	.08000
1.199	9.130	.53450	-.21800	-.02280	.00730	.00170	.25810	.01150	.04370	.07880	.07310
1.199	11.570	.67420	-.25040	-.02940	.01110	.00110	.24430	.01180	.04510	.08100	.07370
1.199	-1.010	-.08080	.02590	-.01800	.00890	.00540	.27960	.01180	.04490	.07600	.08510
	GRADIENT	.06397	-.02555	-.00061	-.00010	-.00031	-.00081	-.00003	-.00012	-.00016	-.00075

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN012) (29 MAY 75)

REFERENCE DATA

SREF = 2890.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 143/ 0 RN/L = 6.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.465	-14.800	-1.19070	.47650	-.00340	.00260	.01020	.29450	.01110	.04240	.06380	.07370
1.465	-12.040	-.93370	.36410	-.00540	.00130	.00920	.29580	.01040	.03970	.06440	.07070
1.465	-9.170	-.68710	.26240	-.00490	.00090	.00730	.29680	.01010	.03840	.06250	.06850
1.465	-6.400	-.47340	.17770	-.01160	.00290	.00590	.29600	.01000	.03800	.05980	.06620
1.465	-3.730	-.28220	.10150	-.00820	.00100	.00540	.29500	.00990	.03770	.05710	.06440
1.465	-1.040	-.09800	.03140	-.01400	.00480	.00440	.29830	.00970	.03710	.05510	.05320
1.465	1.530	.06250	-.02690	-.01590	.00440	.00330	.29850	.00960	.03670	.05410	.05250
1.465	4.070	.21120	-.08370	-.01720	.00440	.00260	.29600	.00940	.03600	.05600	.05290
1.465	6.640	.35940	-.13900	-.01910	.00490	.00180	.29420	.00930	.03540	.05680	.06190
1.465	9.220	.50780	-.19350	-.02110	.00550	.00060	.28660	.00920	.03520	.05700	.06080
1.465	11.680	.65370	-.23410	-.02490	.00620	.00010	.28110	.00930	.03530	.05760	.06050
1.465	-1.020	-.09230	.03000	-.01230	.00360	.00480	.29910	.00970	.03580	.05490	.06320
	GRADIENT	.06321	-.02365	-.00112	.00038	-.00037	.00013	-.00006	-.00021	-.00017	-.00020

RUN NO. 154/ 0 RN/L = 5.13 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.140	-.73580	.28620	.00160	-.00090	.00400	.29040	.00390	.01490	.02590	.03110
2.740	-9.940	-.60820	.23670	.00000	.00000	.00340	.28150	.00420	.01630	.02610	.03150
2.740	-7.590	-.47400	.18430	-.00030	.00030	.00200	.27110	.00420	.01610	.02660	.03180
2.740	-5.260	-.34670	.13770	-.00080	.00020	.00260	.26150	.00440	.01690	.02660	.03170
2.740	-2.980	-.22930	.09570	-.00250	.00100	.00260	.25530	.00450	.01730	.02640	.03060
2.740	-.660	-.12080	.06310	-.00020	-.00060	.00310	.25350	.00460	.01770	.02580	.02850
2.740	1.570	-.02270	.03300	-.00680	.00330	.00130	.25070	.00470	.01790	.02580	.02740
2.740	3.840	.08300	-.00670	-.00460	.00100	.00190	.24750	.00470	.01790	.02560	.02640
2.740	6.150	.19760	-.04850	-.00420	-.00020	.00220	.24480	.00470	.01810	.02530	.02520
2.740	8.470	.31440	-.09040	-.00190	-.00400	.00260	.24100	.00480	.01830	.02590	.02420
2.740	10.630	.43830	-.13870	-.00570	-.00270	.00170	.23850	.00470	.01780	.02550	.02340
2.740	-.620	-.10310	.05550	-.00980	.00580	.00080	.25500	.00460	.01780	.02580	.02800
	GRADIENT	.04562	-.01486	-.00056	.00017	-.00017	-.00115	.00003	.00009	-.00011	-.00060

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N013) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. X*
LREF = 1290.3000 INCHES YMRP = .0000 IN. Y*
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. Z*
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 115/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.605	-11.610	-.78650	.30700	-.01890	.01860	.00190	.10260	.00930	.03550	.06330	.08800
.605	-9.440	-.63740	.24810	-.02320	.02070	.00040	.11090	.00870	.03340	.05900	.08420
.605	-7.190	-.49880	.19440	-.02230	.02000	.00010	.11370	.00870	.03330	.05620	.06250
.605	-5.020	-.38330	.14740	-.02670	.02340	-.00020	.12440	.00840	.03190	.05280	.07510
.605	-2.790	-.25270	.09910	-.02920	.02350	-.00110	.12830	.00830	.03150	.05300	.07270
.605	-.570	-.13650	.05710	-.03020	.02340	-.00110	.12380	.00830	.03160	.05400	.07170
.605	1.630	-.00870	.01130	-.03370	.02440	-.00170	.12230	.00790	.03000	.05160	.07010
.605	3.860	.11700	-.03040	-.03430	.02450	-.00200	.11680	.00810	.03070	.05200	.06880
.605	6.080	.23900	-.07020	-.03950	.02540	-.00310	.10720	.00790	.03000	.05390	.06710
.605	8.330	.36220	-.11280	-.04120	.02460	-.00410	.09770	.00750	.02860	.05620	.06520
.605	10.410	.48760	-.16750	-.04010	.02310	-.00370	.08240	.00770	.02930	.05780	.06580
.605	-.590	-.13600	.05820	-.03030	.02360	-.00080	.12420	.00810	.03100	.05360	.07110
	GRAD'ENT	.05584	-.01961	-.00095	.00018	-.00015	-.00136	-.00005	-.00018	-.00024	-.00060

RUN NO. 114/ 0 RN/L = 6.25 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.903	-13.230	-1.01120	.41180	-.02630	.02210	.00060	.13960	.01230	.04680	.06980	.09390
.903	-10.730	-.79940	.32080	-.03260	.02570	-.00100	.14400	.01150	.04370	.06830	.08820
.903	-8.190	-.61180	.24400	-.03620	.02760	-.00320	.14660	.01090	.04140	.06560	.08550
.903	-5.720	-.43730	.17390	-.03840	.02830	-.00360	.14610	.01050	.04020	.06150	.08410
.903	-3.260	-.27000	.10220	-.03830	.02790	-.00390	.14870	.01000	.03810	.05780	.07940
.903	-.840	-.11290	.02930	-.03900	.02750	-.00410	.15080	.00980	.03720	.05790	.07580
.903	1.550	.04530	-.04060	-.04120	.02730	-.00370	.14910	.00960	.03650	.05670	.07550
.903	3.940	.17900	-.09020	-.04480	.02860	-.00310	.14700	.00930	.03560	.05720	.07350
.903	6.380	.32070	-.13230	-.04480	.02740	-.00400	.13740	.00970	.03680	.06200	.07670
.903	8.830	.45000	-.16620	-.04570	.02540	-.00450	.13510	.00930	.03540	.06740	.07460
.903	11.090	.58300	-.21870	-.04550	.02330	-.00550	.12930	[illegible]	.03860	.08860	.07130
.903	-.830	-.10760	.02590	-.03800	.02680	-.00380	.15120	.00990	.03780	.05810	.07700
	GRADIENT	.06275	-.02698	-.00090	.00008	.00012	-.00028	-.00010	-.00034	-.00012	-.00075

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N013) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 112/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CASE
1.048	-14.190	-1.19090	.52000	-.00950	.01440	.00350	.22930	.01610	.06150	.09260	.10490
1.048	-11.500	-.93560	.41080	-.01120	.01490	.00210	.23990	.01410	.05390	.09110	.10170
1.048	-8.790	-.70770	.31500	-.01470	.01620	.00100	.25120	.01330	.05050	.08670	.09440
1.048	-6.160	-.51230	.23[illegible]	-.01700	.01690	.00040	.25840	.01290	.04890	.08230	.08920
1.048	-3.620	-.34000	.16760	-.02230	.01950	-.00090	.25540	.01280	.04890	.08060	.08830
1.048	-1.050	-.16740	.09900	-.02350	.01950	-.00080	.25500	.01250	.04740	.07890	.08660
1.048	1.400	-.00470	.02400	-.02450	.01860	-.00160	.25190	.01280	.04880	.07690	.08600
1.048	3.890	.16980	-.05230	-.02650	.01950	-.00200	.24260	.01330	.05060	.07950	.08450
1.048	6.420	.31590	-.11180	-.02790	.01630	-.00190	.23270	.01340	.05090	.08240	.08540
1.048	8.970	.47721	-.17160	-.02880	.01550	-.00190	.22940	.01300	.04950	.08490	.07760
1.048	11.280	.60330	-.21780	-.03500	.02010	-.00250	.22160	.01390	.05240	.08400	.07677
1.048	-1.020	-.16310	.09860	-.02410	.01940	-.00080	.24880	.01300	.04950	.08130	.09980
	GRADIENT	.06654	-.02940	-.00056	-.00015	-.00016	-.00166	.00007	.00026	-.00021	-.00047

RUN NO. 113/ 0 RN/L = 6.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CASE
1.205	-14.950	-1.26680	.51820	-.01640	.01380	.00300	.24770	.01500	.05700	.08510	.09500
1.205	-12.090	-.98070	.39850	-.01420	.01390	.00240	.26690	.01440	.05490	.08430	.09150
1.205	-9.190	-.72710	.29540	-.01830	.01600	.00120	.26830	.01380	.05250	.08310	.09090
1.205	-6.430	-.50460	.20690	-.01980	.01640	.00030	.27520	.01290	.04940	.07890	.08850
1.205	-3.760	-.30500	.12650	-.02410	.01950	-.00080	.28060	.01250	.04740	.07520	.08640
1.205	-1.110	-.12580	.05750	-.02500	.01820	-.00120	.28380	.01230	.04680	.07300	.08450
1.205	1.430	.03750	-.00810	-.02700	.01750	-.00210	.28240	.01220	.04640	.07180	.08260
1.205	3.940	.19210	-.07490	-.02880	.01800	-.00230	27580	.01220	.04640	.07390	.08150
1.205	6.530	.35750	-.13830	-.02930	.01640	-.00250	.26590	.01230	.04690	.07650	.08150
1.205	9.090	.51420	-.20240	-.02970	.01470	-.00320	.25930	.01220	.04650	.07910	.07640
1.205	11.540	.66060	-.24910	-.03530	.01770	-.00400	.24830	.01260	.04780	.08090	.07570
1.205	-1.070	-.11520	.05380	-.02480	.01810	-.00110	.28450	.01230	.04690	.07320	.08470
	GRADIENT	.06455	-.02612	-.00063	-.00020	-.00021	-.00061	-.00004	-.00013	-.00020	-.00065

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N013) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-1L = 15.000
ELV-OL = -5.000 ELV-1R = .000
ELV-OR = .000

RUN NO. 145/ 0 RN/L = 6.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.464	-14.820	-1.21170	.49510	-.00870	.00630	.00400	29730	.01090	.04140	.06400	.07370
1.464	-12.060	-.95150	.38090	-.01220	.00830	.00340	.29650	.01020	.03900	.06380	.07030
1.464	-9.180	-.70160	.27610	-.01170	.00740	.00230	.29460	.01000	.03810	.06190	.06840
1.464	-6.420	-.48800	.18920	-.01850	.01030	.00130	.29520	.00980	.03750	.05850	.06580
1.464	-3.750	-.29500	.11180	-.01460	.00810	.00090	.29450	.00980	.03750	.05480	.06420
1.464	-1.060	-.11220	.04250	-.01860	.01030	.00030	.29690	.00970	.03690	.05290	.06310
1.464	1.510	.05110	-.01680	-.02140	.01090	-.00090	.29760	.00960	.03670	.05210	.06270
1.464	4.050	.19690	-.07190	-.02260	.01080	-.00190	.29410	.00940	.03600	.05420	.06300
1.464	6.650	.34760	-.12810	-.02360	.01090	-.00250	.29170	.00940	.03590	.05530	.06250
1.464	9.200	.49450	-.18260	-.02460	.01020	-.00350	.26310	.00920	.03520	.05520	.06060
1.464	11.700	.64300	-.22320	-.02860	.01060	-.00400	.27980	.00920	.03530	.05660	.06030
1.464	-1.010	-.10260	.03930	-.01880	.01050	.00000	.29740	.00970	.03690	.05280	.06310
	GRADIENT	.06314	-.02352	-.00103	.00034	-.00037	-.00001	-.00005	-.00018	-.00010	-.00016

RUN NO. 150/ 0 RN/L = 5.13 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.140	-.74470	.29350	.00080	-.00050	.00170	.28530	.00460	.01770	.02830	.03240
2.740	-9.950	-.61410	.24120	-.00210	.00150	.00100	.27620	.00480	.01850	.02860	.03140
2.740	-7.610	-.47800	.18790	-.00100	.00110	.00120	.27180	.00420	.01610	.02710	.03100
2.740	-5.280	-.34820	.13960	-.00150	.00080	.00150	.26240	.00440	.01690	.02690	.03100
2.740	-2.980	-.23090	.09720	-.00460	.00290	.00080	.25590	.00450	.01730	.02670	.03000
2.740	-.660	-.12050	.06250	-.00720	.00410	.00010	.25340	.00470	.01780	.02610	.02810
2.740	1.570	-.02580	.03520	-.00750	.00420	-.00020	.24520	.00470	.01820	.02820	.02960
2.740	3.840	.08140	-.00470	-.00600	.00250	.00030	.24710	.00480	.01820	.02550	.02800
2.740	6.120	.19030	-.04370	-.00680	.00250	.00010	.24240	.00480	.01830	.02470	.02500
2.740	8.440	.30940	-.08630	-.01020	.00330	-.00110	.23910	.00480	.01840	.02480	.02400
2.740	10.630	.43260	-.13270	-.00970	.00240	-.00100	.23590	.00470	.01820	.02480	.02340
2.740	-.630	-.10790	.05920	-.00620	.00370	.00040	.24910	.00470	.01810	.02820	.03030
	GRADIENT	.04547	-.01468	-.00020	-.00005	-.00008	-.00152	.00004	.00014	-.00007	-.00046

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN014) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 116/ 0 RN/L = 4.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.598	-11.550	-.75870	.28850	-.02300	.02010	.00640	.10020	.00950	.03820	.06460	.08790
.598	-9.400	-.61230	.22930	-.02100	.01840	.00650	.10760	.00900	.03430	.06070	.08530
.598	-7.150	-.47300	.17660	-.02630	.02140	.00470	.11590	.00860	.03290	.05660	.08110
.598	-4.990	-.36700	.13420	-.02990	.02310	.00360	.12380	.00850	.03230	.05430	.07560
.598	-2.770	-.23810	.08510	-.03210	.02420	.00340	.12550	.00830	.03160	.05390	.07260
.598	-.540	-.11250	.04020	-.03750	.02590	.00190	.12420	.00920	.03130	.05390	.07070
.598	1.640	.01020	-.00340	-.03770	.02590	.00220	.12090	.00820	.03120	.05340	.07090
.598	3.870	.13570	-.04670	-.04070	.02580	.00150	.11540	.01010	.03100	.05280	.06870
.598	6.090	.25750	-.08740	-.04130	.02550	.00140	.10870	.00780	.02990	.05310	.06690
.598	8.360	.39990	-.13450	-.04430	.02500	.00070	.09540	.00770	.02950	.05640	.06570
.598	10.410	.51180	-.18770	-.04380	.02480	.00100	.08590	.00760	.02900	.05600	.06420
.598	-.550	-.11900	.04350	-.03420	.02480	.00290	.12520	.00820	.03130	.05410	.07120
	GRADIENT	.05565	-.02039	-.00132	.00032	-.00024	-.00093	-.00004	-.00014	-.00016	-.00070

RUN NO. 117/ 0 RN/L = 6.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.899	-13.210	-.99380	.39510	-.02780	.02250	.00520	.13890	.01210	.04600	.07100	.09360
.899	-10.740	-.78790	.30890	-.02450	.02110	.00390	.14410	.01140	.04330	.07090	.09010
.899	-8.130	-.58180	.22170	-.02520	.02120	.00240	.14280	.01070	.04070	.06620	.08560
.899	-5.650	-.41490	.15530	-.02900	.02310	.00090	.14510	.01030	.03920	.06120	.08340
.899	-3.240	-.25460	.08890	-.03250	.02480	-.00010	.14670	.01000	.03800	.05860	.07960
.899	-.830	-.09350	.01330	-.03340	.02450	-.00100	.15100	.00950	.03630	.05730	.07590
.899	1.570	.05670	-.04950	-.03630	.02520	-.00170	.14840	.00940	.03580	.05650	.07510
.899	3.950	.18600	-.09580	-.04060	.02680	-.00180	.14530	.00950	.03630	.05740	.07510
.899	6.400	.33200	-.14000	-.03940	.02430	-.00170	.13880	.00950	.03630	.06130	.07630
.899	8.840	.46400	-.17560	-.04180	.02380	-.00170	.13060	.00960	.03650	.06840	.07640
.899	11.080	.59230	-.22870	-.03740	.01930	-.00170	.12970	.00930	.03540	.06410	.06980
.899	-.830	-.09170	.01370	-.03220	.02400	-.00060	.15170	.00970	.03690	.05820	.07660
	GRADIENT	.06142	-.02574	-.00113	.00028	-.00024	-.00028	-.00007	-.00023	-.00018	-.00060

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N014) (29 MAY 75)

REFERENCE DATA

SREF = 2880.0000 SQ. FT XMRP = 878.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-1L = 15.000
ELV-OL = .000 ELV-1R = .000
ELV-OR = .000

RUN NO. 119/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.047	-14.180	-1.17490	.50720	-.00530	.01170	.00780	.23070	.01560	.05930	.09280	.10660
1.047	-11.450	-.91320	.39250	-.01000	.01380	.00620	.23400	.01440	.05490	.09420	.10500
1.047	-8.750	-.69050	.30050	-.01250	.01450	.00550	.24660	.01350	.05150	.08890	.09720
1.047	-6.150	-.49870	.22420	-.01540	.01520	.00410	.25190	.01320	.05020	.08470	.09230
1.047	-3.590	-.32100	.15320	-.01830	.01670	.00330	.25720	.01250	.04770	.07970	.08820
1.047	-1.040	-.15110	.08840	-.02130	.01780	.00260	.25330	.01250	.04750	.07920	.08830
1.047	1.430	.01030	.01220	-.02340	.01760	.00150	.24940	.01280	.04890	.07740	.08680
1.047	3.910	.17210	-.06260	-.02500	.01720	.00100	.24060	.01330	.05070	.08020	.08500
1.047	6.450	.32870	-.11960	-.02750	.01590	-.00050	.22870	.01360	.05170	.08390	.08670
1.047	8.980	.48360	-.17600	-.02680	.01370	-.00030	.22820	.01300	.04970	.08510	.07840
1.047	11.290	.60930	-.22200	-.03230	.01750	-.00040	.22110	.01380	.05240	.08370	.07760
	GRADIENT	.06571	-.02889	-.00089	.00005	-.00032	-.00215	.00011	.00042	-.00001	-.00044

RUN NO. 118/ 0 RN/L = 6.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.205	-14.900	-1.24630	.50370	-.01220	.01040	.00700	.25540	.01480	.05630	.08440	.09490
1.205	-12.060	-.96540	.38430	-.01250	.01180	.00640	.26670	.01430	.05460	.08530	.09180
1.205	-9.170	-.70940	.28180	-.01470	.01290	.00510	.27100	.01340	.05110	.08160	.08830
1.205	-6.420	-.49020	.19550	-.01720	.01420	.00370	.27450	.01290	.04910	.07860	.08650
1.205	-3.740	-.29230	.11590	-.02120	.01560	.00210	.27950	.01230	.04680	.07550	.08700
1.205	-1.070	-.10770	.04420	-.02370	.01600	.00150	.28370	.01220	.04640	.07330	.08410
1.205	1.460	.05330	-.01990	-.02320	.01390	.00110	.28120	.01210	.04610	.07270	.08310
1.205	3.970	.20630	-.08590	-.02710	.01520	.00000	.27440	.01210	.04610	.07420	.08160
1.205	6.560	.36720	-.14470	-.02510	.01260	-.00040	.26810	.01220	.04630	.07650	.08100
1.205	9.140	.52370	-.20930	-.02650	.01120	-.00130	.26060	.01200	.04560	.07860	.07440
1.205	11.550	.66820	-.25450	-.03210	.01440	-.00210	.24910	.01230	.04700	.08030	.07460
	GRADIENT	.06459	-.02609	-.00067	-.00013	-.00026	-.00068	-.00003	-.00009	-.00018	-.00067

MSFC TWT 522 (1A125) LAUNCH VEHICLE. 74 OTS (R1N0141 (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-TL = 15.000
ELV-OL = .000 ELV-IR = .000
ELV-CR = .000

RUN NO. 146/ 0 RN/L = 6.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.462	-14.810	-1.20230	.48710	-.00520	.00380	.00680	.29660	.01090	.04140	.06440	.07400
1.462	-12.040	-.94040	.37220	-.00890	.00550	.00560	.29580	.01030	.03920	.06390	.07030
1.462	-9.180	-.69510	.26900	-.00820	.00460	.00480	.29510	.01010	.03860	.06230	.06860
1.462	-6.410	-.47860	.18130	-.01650	.00950	.00340	.29560	.00990	.03780	.05900	.06600
1.462	-3.730	-.28270	.10290	-.01270	.00520	.00281	.29450	.00930	.03770	.05580	.06430
1.462	-1.050	-.10290	.03540	-.01160	.00380	.00172	.29760	.00970	.03714	.05360	.06340
1.462	1.630	.05550	-.03230	-.02000	.00930	.00180	.29750	.00970	.03690	.05290	.06330
1.462	4.160	.20440	-.07750	-.01930	.01200	-.00710	.29410	.00950	.03570	.05530	.06320
1.462	6.630	.35080	-.13140	-.02130	.00950	-.00[illegible]	.29180	.00940	.03590	.05520	.06230
1.462	9.210	.50080	-.18710	-.02330	.01340	-.00181	.28560	.00930	.03550	.05600	.06080
1.462	11.700	.64570	-.22720	-.02660	.01990	-.00340	.28050	.00930	.03540	.05690	.06030
1.462	-1.020	-.09800	.03550	-.01700	.01640	.00170	.29900	.00970	.03700	.05350	.06310
	GRADIENT	.06256	-.02310	-.00093	.00123	-.00039	-.00004	-.00015	-.00017	-.00009	-.00013

RUN NO. 149/ 0 RN/L = 5.13 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.140	-.74050	.29030	-.00040	.00070	.00240	.28950	.00410	.01560	.02600	.03210
2.740	-9.940	-.60920	.23730	-.00120	.00140	.00240	.28040	.00430	.01550	.02640	.03120
2.740	-7.610	-.47630	.18520	-.00230	.00180	.00170	.27090	.00420	.01610	.02710	.03120
2.740	-5.290	-.34810	.13860	-.00210	.00150	.00150	.26210	.00440	.01690	.02680	.03110
2.740	-2.980	-.22940	.09620	-.00530	.00330	.00130	.25610	.00450	.01730	.02660	.03000
2.740	-.680	-.12040	.06210	-.00710	.00470	.00070	.25340	.00470	.01780	.02610	.02800
2.740	1.570	-.02440	.03390	-.00740	.00410	.00020	.25020	.00480	.01820	.02580	.02690
2.740	3.840	.08160	-.00570	-.00730	.00350	.00060	.24690	.00480	.01830	.02550	.02600
2.740	6.120	.19330	-.04631	-.00820	.00340	.00020	.24280	.00480	.01830	.02470	.02490
2.740	8.440	.31050	-.08870	-.00800	.00150	.00030	.23920	.00480	.01830	.02470	.02400
2.740	10.630	.43420	-.13420	-.00980	.00180	-.00080	.23660	.00470	.01790	.02480	.02340
2.740	-.620	-.10360	.05610	-.00690	.00410	.00060	.25310	.00470	.01800	.02590	.02750
	GRADIENT	.04531	-.01470	-.00028	.00001	-.00011	-.00136	.00004	.00015	-.00016	-.00058

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N015) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = 5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 107/ 0 RN/L = 4.91 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.596	-11.540	-.76550	.28740	-.00930	.01060	.00950	.08340	.00960	.03650	.06810	.10110
.596	-9.380	-.61580	.22760	-.01050	.01070	.00680	.09130	.00930	.03560	.06520	.09760
.596	-7.150	-.47840	.17540	-.01500	.01300	.00770	.10190	.00910	.03450	.06080	.09230
.596	-4.960	-.36130	.12810	-.01850	.01520	.00680	.11110	.00880	.03360	.05810	.08430
.596	-2.760	-.23050	.08030	-.02080	.01630	.00630	.11310	.00870	.03320	.05850	.08170
.596	-.540	-.10860	.03610	-.02620	.01860	.00540	.11040	.00870	.03300	.05890	.07990
.596	1.650	.01990	-.01140	-.03080	.01970	.00450	.10770	.00830	.03180	.05750	.07920
.596	3.880	.14620	-.05360	-.03260	.02050	.00460	.10280	.00850	.03230	.05780	.07710
.596	6.100	.27480	-.09880	-.03430	.02030	.00510	.09730	.00800	.03050	.05750	.07350
.596	8.350	.40530	-.14390	-.03630	.01990	.00420	.08310	.00810	.03080	.06120	.07400
.596	10.420	.52400	-.19680	-.03770	.02020	.00420	.07270	.00790	.03030	.06100	.07130
.596	-.540	-.11210	.03780	-.02380	.01770	.00600	.11310	.00840	.03220	.05840	.07840
	GRADIENT	.05729	-.02050	-.00172	.00053	-.00028	-.00100	-.00005	-.00018	-.00007	-.00077

RUN NO. 106/ 0 RN/L = 6.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.903	-13.130	-.97080	.38040	-.01850	.01620	.00860	.13080	.01230	.04680	.07350	.09940
.903	-10.660	-.76790	.29460	-.02560	.02110	.00680	.13610	.01150	.04390	.07190	.09540
.903	-8.160	-.58310	.21950	-.02890	.02320	.00460	.14000	.01080	.04130	.06780	.09070
.903	-5.670	-.41150	.15170	-.03010	.02270	.00350	.14140	.01050	.04020	.06420	.08750
.903	-3.250	-.25220	.08570	-.03230	.02360	.00230	.14520	.00970	.03710	.06040	.08170
.903	-.820	-.09093	.01050	-.03590	.02400	.00060	.14360	.00980	.03730	.06120	.08090
.903	1.580	.06710	-.05850	-.03620	.02330	.00040	.14320	.00960	.03670	.06000	.07990
.903	3.950	.19950	-.10840	-.04280	.02660	.00070	.13690	.00980	.03728	.06230	.08010
.903	6.400	.33693	-.14710	-.04030	.02330	.00120	.13170	.01000	.03810	.06570	.08100
.903	8.860	.47510	-.18550	-.04160	.02170	.00100	.12430	.00970	.03720	.07140	.08050
.903	11.130	.61070	-.24020	-.03370	.01950	.00160	.12500	.00990	.03760	.06840	.07620
.903	-.800	-.08450	.00680	-.03300	.02340	.00150	.14510	.00990	.03760	.06060	.08110
	GRADIENT	.06293	-.02715	-.00132	.00034	-.00021	-.00105	.00000	-.00001	.00019	-.00024

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N015) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = 5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 104/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.046	-14.130	-1.15280	.48990	-.00410	.00910	.00990	.22400	.01490	.05660	.09050	.10080
1.046	-11.450	-.89530	.37860	-.00610	.01000	.00850	.24320	.01280	.04890	.08990	.09450
1.046	-8.720	-.67160	.28610	-.00730	.00970	.00830	.24740	.01250	.04750	.08550	.09210
1.046	-6.120	-.48380	.21170	-.01070	.01060	.00690	.25480	.01190	.04510	.08140	.08660
1.046	-3.570	-.31520	.14680	-.01460	.01230	[illegible]	.25020	.01210	.04610	.08060	.08570
1.046	-1.040	-.14940	.08230	-.01860	.01180	.01120	.24190	.01190	.04530	.08100	.08570
1.046	1.410	.00530	.01170	-.02160	[illegible]	.00410	.24230	.01240	.04730	.07870	.08530
1.046	3.900	.17020	-.05470	-.02250	.01380	.00330	.24070	.01210	.04610	.07810	.08090
1.046	6.440	.32790	-.12320	-.02310	.01780	.00260	.22890	.01250	.04760	.08180	.08240
1.046	8.980	.47870	-.17560	-.02530	[illegible]	[illegible]	.22380	.01210	.04600	.08370	.07770
1.046	11.280	.60420	-.22350	-.03020	.01500	[illegible]	.21600	.01310	.04990	.08310	.07750
1.046	-.980	-.14500	.08140	-.02060	.01490	.00460	.24330	.01220	.04650	.08240	.08730
	GRADIENT	.05490	-.02836	-.00107	.00022	-.00039	-.00133	.00002	.00008	-.00039	-.00072

RUN NO. 105/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.199	-14.930	-1.26570	.50860	-.00850	.00830	.00900	.22520	.01530	.05840	.08940	.10090
1.199	-12.090	-.97610	.38340	-.00740	.00770	.00860	.24380	.01520	.05800	.09150	.09710
1.199	-9.160	-.70500	.27370	-.00830	.00720	.00730	.25260	.01420	.05420	.08640	.09360
1.199	-6.390	-.48430	.18630	-.01300	.00880	.00540	.25500	.01360	.05190	.08390	.09310
1.199	-3.730	-.28880	.11010	-.01460	.00920	.00450	.25990	.01320	.05030	.08230	.09230
1.199	-1.070	-.10390	.03910	-.01860	.01090	.00350	.26660	.01290	.04910	.07980	.08960
1.199	1.470	.05700	-.02320	-.01920	.00990	.00310	.26190	.01270	.04660	.07930	.08900
1.199	3.980	.20770	-.08710	-.02150	.01020	.00220	.25650	.01290	.04930	.08200	.08790
1.199	6.580	.36810	-.14660	-.02180	.00930	.00170	.25540	.01240	.04720	.08130	.08300
1.199	9.140	.52130	-.20620	-.02390	.00910	.00050	.24490	.01260	.04800	.06380	.07910
1.199	11.570	.65510	-.24200	-.02950	.01250	-.00130	.23380	.01280	.04870	.08550	.07850
1.199	-1.020	-.09010	.03230	-.01680	.00960	.00360	.26670	.01250	.04750	.07810	.08720
	GRADIENT	.06432	-.02548	-.00084	.00008	-.00028	-.00057	-.00004	-.00014	-.00006	-.00054

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N015) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = 5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 144/ 0 RN/L = 6.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.468	-14.810	-1.20170	.48540	-.00320	.00270	.00840	.29450	.01090	.04160	.06340	.07340
1.468	-12.050	-.93870	.37040	-.00550	.00280	.00730	.29480	.01020	.03900	.06390	.07020
1.468	-9.180	-.69360	.26750	-.00640	.00230	.00590	.29330	.01010	.03850	.06280	.06890
1.468	-6.410	-.47730	.18240	-.01260	.00450	.00460	.29360	.00990	.03780	.05960	.06600
1.468	-3.720	-.28320	.10380	-.00880	.00220	.00400	.29260	.00980	.03750	.05640	.06440
1.468	-1.050	-.10370	.03570	-.01400	.00550	.00310	.29620	.00960	.03670	.05430	.06320
1.468	1.520	.05770	-.02250	-.01590	.00550	.00210	.29560	.00950	.03630	.05380	.06270
1.468	4.050	.20170	-.07700	-.01710	.00500	.00130	.29340	.00940	.03580	.05570	.06290
1.468	6.630	.35380	-.13440	-.02050	.00660	.00030	.29220	.00930	.03540	.05630	.06210
1.468	9.210	.50260	-.18920	-.02200	.00700	-.00040	.28570	.00920	.03500	.05640	.06080
1.468	11.690	.64740	-.22960	-.02620	.00780	-.00130	.27950	.00930	.03530	.05750	.06090
1.468	-.990	-.09520	.03360	-.01330	.00500	.00330	.29620	.00960	.03680	.05430	.06340
	GRADIENT	.06247	-.02322	-.00104	.00033	-.00035	.00008	-.00005	-.00021	-.00010	-.00019

RUN NO. 152/ 0 RN/L = 5.14 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.130	-.73440	.28490	.00100	-.00010	.00340	.29030	.00390	.01490	.02560	.03110
2.740	-9.940	-.60830	.23700	.00000	.00030	.00310	.28060	.00430	.01630	.02590	.03160
2.740	-7.610	-.47510	.18490	.00050	.00050	.00270	.26870	.00420	.01610	.02650	.03190
2.740	-5.280	-.34680	.13690	.00000	.00000	.00310	.26140	.00440	.01690	.02650	.03180
2.740	-2.980	-.22750	.09490	-.00390	.00240	.00190	.25430	.00450	.01730	.02620	.03060
2.740	-.680	-.12050	.06220	-.00440	.00230	.00170	.25320	.00460	.01770	.02560	.02860
2.740	1.570	-.02290	.03320	-.00540	.00250	.00130	.24970	.00470	.01790	.02570	.02750
2.740	3.840	.08160	-.00600	-.00600	.00220	.00090	.24670	.00470	.01800	.02550	.02650
2.740	6.120	.19500	-.04740	-.00690	.00200	.00090	.24330	.00470	.01820	.02490	.02540
2.740	8.460	.31190	-.08950	-.00380	-.00180	.00170	.24010	.00480	.01830	.02550	.02440
2.740	10.630	.43680	-.13730	-.00560	-.00170	.00130	.23800	.00470	.01790	.02520	.02370
2.740	-.620	-.10360	.05550	-.00470	.00260	.00160	.25440	.00470	.01780	.02560	.02810
	GRADIENT	.04513	-.01461	-.00032	-.00002	-.00015	-.00116	.00003	.00010	-.00009	-.00059

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N015) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 108/ 0 RN/L = 4.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CN90	CA90	CABS	CABE
.598	-11.480	-.72170	.25070	-.02220	.01990	.01210	.09480	.00890	.03400	.05570	.06500
.598	-9.370	-.59000	.20730	-.02650	.02180	.01080	.09610	.00940	.03570	.06550	.06560
.598	-7.140	-.45390	.15690	-.02580	.02130	.01030	.10550	.00910	.03480	.06190	.09010
.598	-4.950	-.33870	.11030	-.02740	.02110	.00980	.11330	.00900	.03440	.05970	.08380
.598	-2.750	-.20900	.06320	-.03140	.02380	.00910	.12110	.00840	.03220	.05630	.07750
.598	-.520	-.08740	.01930	-.03710	.02630	.00900	.11890	.00850	.03270	.05740	.07660
.598	1.670	.04570	-.03150	-.04180	.02750	.00790	.11340	.00850	.03240	.05680	.07680
.598	3.900	.17270	-.07620	-.04130	.02630	.00820	.11030	.00850	.03250	.05650	.07460
.598	6.150	.30290	-.11950	-.04350	.02610	.00960	.10120	.00840	.03210	.05770	.07300
.598	8.400	.43500	-.16720	-.04540	.02530	.00940	.08730	.00940	.03200	.06060	.07290
.598	10.450	.55460	-.22090	-.04680	.02570	.00770	.08040	.00790	.03020	.05900	.06950
.598	-.520	-.09590	.01650	-.03600	.02560	.00850	.11940	.00850	.03280	.05780	.07680
	GRADIENT	.05772	-.02113	-.00173	.00054	-.00020	-.00062	-.00004	-.00016	-.00027	-.00086

RUN NO 109/ 0 RN/L = 6.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CN90	CA90	CABS	CABE
.899	-13.130	-.96450	.37370	-.02220	.01770	.01060	.12850	.01220	.04660	.07390	.10210
.899	-10.660	-.75390	.29460	-.02440	.01920	.00860	.13440	.01150	.04370	.07210	.09700
.899	-8.130	-.57260	.21150	-.02810	.02050	.00750	.13980	.01090	.04140	.06810	.09180
.899	-5.660	-.39530	.13900	-.02980	.02120	.00570	.13950	.01070	.04080	.06430	.08820
.899	-3.220	-.23520	.07230	-.03550	.02410	.00420	.14350	.01010	.03860	.06070	.08280
.899	-.810	-.07270	-.00380	-.03420	.02210	.00420	.14530	.00990	.03760	.05970	.08150
.899	1.600	.08350	-.07130	-.03320	.02030	.00440	.14180	.01020	.03870	.06030	.08190
.899	4.000	.22210	-.12340	-.04320	.02550	.00420	.14080	.00980	.03730	.05890	.07890
.899	6.420	.35450	-.16080	-.04040	.02290	.00450	.13490	.01000	.03920	.06230	.08010
.899	8.870	.48570	-.19430	-.04320	.02230	.00350	.12580	.01000	.03790	.06800	.08080
.899	11.310	.61420	-.24510	-.03850	.01790	.00320	.12330	.01020	.03890	.05470	.07750
.899	-.790	-.07160	-.00430	-.03360	.02160	.00430	.14630	.00990	.03780	.05980	.08160
	GRADIENT	.06349	-.02720	-.00090	.00010	.00001	-.00048	-.00002	-.00012	-.00020	-.00047

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N016) (29 MAY 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 111/ 0 RN/L = 6.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.046	-14.160	-1.15320	.48800	-.00440	.00940	.01300	.23330	.01550	.05900	.09340	.10620
1.046	-11.440	-.89360	.37600	-.00760	.01056	.01190	.23880	.01430	.05430	.09440	.10370
1.046	-8.740	-.67400	.28530	-.00950	.01090	.01100	.25000	.01360	.05170	.08910	.09790
1.046	-6.110	-.47520	.20530	-.01200	.01090	.00990	.25560	.01310	.04980	.08430	.09270
1.046	-3.580	-.30430	.13790	-.01400	.01120	.00900	.26020	.01250	.04780	.08040	.08930
1.046	-1.020	-.13360	.07040	-.01940	.01390	.00840	.24920	.01310	.05000	.08220	.09120
1.046	1.450	.02880	-.00450	-.02100	.01300	00730	.24580	.01350	.05160	.08060	.08920
1.046	3.930	.18960	-.07780	-.02480	.01440	.00600	.23910	.01400	.05330	.08200	.08700
1.045	6.480	.35970	-.14400	-.02190	.01060	.00560	.23940	.01310	.04990	.08030	.08390
1.046	9.000	.50300	-.19340	-.02420	.01010	.00530	.23010	.01360	.05170	.08430	.07810
1.046	11.300	.62790	-.23940	-.03240	.01570	.00470	.21980	.01470	.05580	.08450	.08030
1.046	-.980	-.12790	.06830	-.01860	.01300	.00840	.24780	.01330	.05060	.08300	.09190
	GRADIENT	.06577	-.02887	-.00136	.00035	-.00040	-.00267	.00020	.00072	.00013	-.00035

RUN NO. 110/ 0 RN/L = 6.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.197	-14.890	-1.22990	.48840	-.01000	.00750	.01140	.25180	.01490	.05670	.08550	.09480
1.197	-12.040	-.94800	.36990	-.00950	.00780	.01070	.26520	.01460	.05570	.08690	.09310
1.197	-9.130	-.69280	.26650	-.01230	.00880	.00960	.26760	.01410	.05350	.08530	.09240
1.197	-6.380	-.46790	.17610	-.01480	.00990	.00800	.27320	.01310	.04990	.08110	.09100
1.197	-3.710	-.27200	.09770	-.01890	.01120	.00650	.27660	.01270	.04850	.07840	.09030
1.197	-1.070	-.08960	.02910	-.02140	.01180	.00580	.28470	.01240	.04730	.07510	.08580
1.197	1.480	.07010	-.03520	-.02140	.01010	.00490	.28090	.01230	.04700	.07410	.08460
1.197	4.000	.22680	-.10330	-.02340	.00990	.00410	.27610	.01230	.04670	.07560	.08240
1.197	6.590	.39240	-.16510	-.02330	.00860	.00320	.26580	.01260	.04780	.07820	.08340
1.197	9.140	.54380	-.22560	-.02470	.00760	.00200	.26200	.01230	.04670	.07950	.07470
1.197	11.580	.68880	-.27200	-.03070	.01130	.00160	.25100	.01270	.04820	.08050	.07570
1.197	-1.040	-.08340	.02800	-.01970	.01060	.00610	.28660	.01220	.04670	.07480	.08450
	GRADIENT	.06451	-.02598	-.00053	-.00022	-.00032	-.00019	-.00005	-.00022	-.00037	-.00097

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 DTS (RIN016) (29 MAY 75

REFERENCE DATA

SREF = 2890.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 147/ 0 RN/L = 6.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.465	-14.820	-1.19110	.47640	-.00200	.00080	.01090	.29740	.01090	.04170	.05470	.07450
1.465	-12.050	-.93090	.36220	-.00570	.00210	.00950	.29630	.01040	.03980	.06470	.07110
1.465	-9.190	-.68390	.25900	-.00570	.00140	.00920	.29530	.01040	.03960	.06350	.06920
1.465	-6.410	-.46840	.17420	-.01240	.00400	.00850	.29580	.01010	.03840	.05990	.06590
1.465	-3.720	-.27540	.09610	-.00900	.00170	.00530	.29650	.01000	.03800	.05740	.06390
1.465	-1.060	-.09440	.02710	-.01290	.00410	.00590	.29960	.00980	.03740	.05520	.06250
1.465	1.530	.06790	-.03160	-.01540	.00390	.00420	.29930	.00980	.03730	.05480	.06230
1.465	4.060	.21390	-.08740	-.01610	.00330	.00350	.29790	.00950	.03660	.05640	.06220
1.465	6.620	.36240	-.14210	-.01810	.00380	.00250	.29450	.00950	.03540	.05720	.06180
1.465	9.200	.51340	-.19790	-.01950	.00410	.00170	.28960	.00940	.03580	.05650	.05990
1.465	11.700	.66040	-.23870	-.02250	.00410	.00100	.28310	.00930	.03550	.05710	.05930
1.465	-1.030	-.08570	.02490	-.01360	.00430	.00540	.30080	.00980	.03730	.05500	.05240
	GRADIENT	.05290	-.02350	-.00092	.00018	-.00039	.00015	-.00005	-.00017	-.00013	-.00021

RUN NO. 148/ 0 RN/L = 5.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.120	-.72940	.28450	.00220	-.00130	.00470	.29090	.00410	.01580	.02620	.03250
2.740	-9.930	-.60070	.23270	.00000	.00000	.00390	.28220	.00430	.01630	.02670	.03090
2.740	-7.600	-.46930	.18210	-.00040	.00010	.00260	.27220	.00420	.01600	.02740	.03010
2.740	-5.260	-.33720	.13240	.00050	-.00060	.00330	.26330	.00440	.01690	.02690	.03040
2.740	-2.960	-.21960	.09010	-.00260	.00110	.00260	.25680	.00450	.01730	.02660	.02960
2.740	-.670	-.11070	.05690	-.00390	.00140	.00240	.25520	.00470	.01780	.02600	.02780
2.740	1.590	-.01040	.02500	-.00410	.00110	.00200	.25070	.00480	.01820	.02580	.02660
2.740	3.850	.09130	-.01130	-.00400	.00020	.00200	.24830	.00480	.01820	.02570	.02570
2.740	6.140	.20570	-.05300	-.00150	-.00280	.00300	.24550	.00470	.01810	.02540	.02450
2.740	8.460	.32440	-.09690	.00000	-.00590	.00330	.24250	.00480	.01830	.02560	.02340
2.740	10.640	.44660	-.14360	-.00430	-.00380	.00190	.23980	.00470	.01800	.02540	.02300
2.740	-.470	-.03710	.02800	-.00210	.00000	.00260	.27020	.00270	.01030	.02060	.02010
	GRADIENT	.04553	-.01481	-.00019	-.00013	-.00010	-.00132	.00004	.00014	-.00013	-.00057

MSFC TMT 622 (1A125) LAUNCH VEHICLE, 74OTS+Z13 (R1N017) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1280.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 67/ 0 RN/L = 6.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.798	-12.850	-1.01580	.43870	-.00130	.00060	.00490	.13880	.01100	.04180	.06860	.09720
.798	-10.550	-.85780	.38160	-.00020	.00000	.00300	.14240	.01070	.04090	.06570	.09520
.798	-8.120	-.70200	.32510	.00260	-.00140	.00260	.14560	.01010	.03850	.06040	.08990
.798	-5.780	-.55720	.26860	-.00350	.00200	.00150	.15080	.00970	.03690	.05580	.08670
.798	-3.420	-.41850	.20950	-.00310	.00090	.00110	.14980	.00970	.03680	.05730	.08440
.798	-1.050	-.27430	.15600	-.01090	.00460	.00000	.15050	.00920	.03520	.05830	.08140
.798	1.240	-.14280	.10730	-.01020	.00350	-.00040	.14570	.00900	.03450	.05900	.08130
.798	3.620	-.00250	.06110	-.01510	.00550	-.00130	.14080	.00850	.03240	.05950	.07930
.798	6.030	.14870	.00980	-.01910	.00650	-.00150	.12960	.00850	.03250	.06360	.07860
.798	8.440	.30850	-.05550	-.02100	.00540	-.00230	.11830	.00840	.03210	.06600	.07490
.798	10.840	.46260	-.12800	-.02250	.00530	-.00230	.11050	.00840	.03190	.06540	.07370
.798	-1.050	-.27060	.15570	-.00680	.00220	.00020	.15110	.00920	.03520	.05850	.08110
	GRADIENT	.05867	-.02110	-.00151	.00054	-.00032	-.00136	-.00016	-.00059	.00031	-.00066

RUN NO. 66/ 0 RN/L = 6.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.899	-13.390	-1.10170	.47370	-.00120	.00190	.00370	.14740	.01310	.05000	.07220	.10540
.899	-10.980	-.90660	.40330	-.00100	.00240	.00220	.15820	.01170	.04460	.06830	.09890
.899	-8.470	-.73760	.34200	-.00740	.00460	.00090	.16240	.01120	.04260	.06460	.09530
.899	-6.020	-.57140	.27920	-.00840	.00480	.00020	.16510	.01080	.04100	.06240	.09220
.899	-3.590	-.41380	.21530	-.00870	.00500	-.00020	.16590	.01020	.03900	.06080	.08730
.899	-1.180	-.26720	.15070	-.01160	.00540	-.00120	.16540	.01040	.03950	.06400	.08710
.899	1.200	-.11940	.09070	-.01550	.00720	-.00260	.16530	.00970	.03680	.06140	.08370
.899	3.630	.04060	.01960	-.01890	.00800	-.00330	.15530	.00960	.03650	.06330	.08300
.899	6.150	.20810	-.04400	-.02180	.00850	-.00390	.15000	.00940	.03[illegible]	.06630	.08130
.899	8.630	.37420	-.10380	-.02230	.00700	-.00420	.13750	.00960	.03[illegible]	.07320	.08200
.899	10.920	.52840	-.17190	-.02060	.00370	-.00440	.13380	.00970	.03700	.07258	.07640
.899	-1.170	-.26950	.15120	-.01300	.00590	-.00120	.16880	.01030	.03910	.06350	.08670
	GRADIENT	.06203	-.02692	-.00143	.00045	-.00044	-.00133	-.00010	-.00042	.00021	-.00068

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+Z13 (R1N017) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 63/ 0 RN/L = 6.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CASE
.997	-14.080	-1.19970	.54030	.01340	-.00480	.00560	.23630	.01570	.05960	.08630	.10370
.997	-11.560	-.97760	.44610	.00890	-.00270	.00380	.24460	.01490	.05670	.09460	.10850
.997	-8.900	-.77410	.36730	.00720	-.00230	.00360	.24500	.01410	.05370	.08900	.10430
.997	-6.350	-.60280	.30450	.00390	-.00140	.00220	.24810	.01360	.05170	.08610	.10200
.997	-3.840	-.44020	.24360	.00100	-.00050	.00170	.25000	.01330	.05060	.08680	.10040
.997	-1.330	-.28650	.18750	-.00230	.00090	.00120	.24760	.01290	.04920	.08720	.09870
.997	1.080	-.13450	.11860	-.00410	.00190	.00020	.24220	.01280	.04870	.08390	.09580
.997	3.580	.03780	.04050	-.01010	.00460	-.00120	.23670	.01290	.04900	.08720	.09420
.997	6.120	.22000	-.04520	-.01150	.00400	-.00120	.22170	.01230	.04700	.08730	.09120
97	8.700	.39080	-.10330	-.01140	.00120	-.00200	.21540	.01300	.04940	.09310	.09150
.997	11.020	.54690	-.17260	-.00840	-.00350	-.00190	.20570	.01250	.04770	.09210	.08650
.997	-1.280	-.27960	.18230	-.00440	.00200	.00030	.23780	.01270	.04840	.08460	.09840
	GRADIENT	.06429	-.02747	-.00142	.00056	-.00039	-.00183	-.00005	-.00021	-.00008	-.00087

RUN NO. 62/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CASE
1.048	-14.370	-1.23240	.55430	.01570	-.00630	.00590	.25000	.01540	.05850	.09180	.11100
1.048	-11.740	-.99410	.45630	.01080	-.00450	.00460	.26810	.01330	.05060	.09260	.10520
1.048	-9.040	-.78320	.37380	.00700	-.00250	.00350	.26880	.01340	.05090	.09170	.10450
1.048	-6.450	-.60000	.30450	.00520	-.00240	.00290	.27380	.01310	.04990	.08650	.10020
1.048	-3.910	-.43490	.24160	.00010	.00010	.00130	.27740	.01260	.04800	.08360	.09520
1.048	-1.370	-.27780	.18400	-.00280	.00170	.00080	.27460	.01220	.04640	.08360	.09250
1.048	1.100	-.11420	.10910	-.00480	.00190	.00000	.26790	.01190	.04540	.08120	.09110
1.048	3.600	.05370	.03210	-.00750	.00270	-.00090	.25700	.01210	.04600	.08310	.08970
1.048	6.170	.23340	-.04230	-.00900	.00210	-.00140	.25060	.01170	.04460	.08330	.08600
1.048	8.730	.39690	-.10470	-.00970	.00010	-.00170	.23400	.01180	.04480	.08810	.08590
1.048	11.080	.53850	-.18480	-.01180	-.00110	-.00280	.22040	.01200	.04590	.09020	.08450
1.048	-1.340	-.27340	.18360	-.00210	.00080	.00100	.26970	.01260	.04810	.08600	.09500
	GRADIENT	.06517	-.02813	-.00099	.00032	-.00028	-.00271	-.00007	-.00028	-.00016	-.00072

MSFC TWT 822 (1A125) LAUNCH VEHICLE, 74075+213 (R1N017) (19 JUN 75)

REFERENCE DATA

SREF = 2640.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 61/ 0 RN/L = 8.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.106	-14.800	-1.25820	.56440	.01730	-.00880	.00580	.27180	.01400	.05340	.08420	.10270
1.106	-11.800	-1.01080	.46550	.01230	-.00390	.00480	.28810	.01250	.04750	.08570	.09930
1.106	-8.190	-.79820	.38440	.01080	-.00440	.00360	.28190	.01210	.04610	.08460	.09770
1.106	-6.570	-.61440	.31630	.00980	-.00490	.00300	.29450	.01220	.04630	.08150	.09590
1.106	-4.000	-.44850	.25370	.00510	-.00280	.00140	.29440	.01200	.04560	.07890	.09240
1.106	-1.390	-.27530	.18710	.00190	-.00140	.00080	.29220	.01140	.04360	.07700	.08830
1.106	1.110	-.10640	.11110	.00010	-.00110	.00020	.28310	.01110	.04240	.07560	.08620
1.106	3.850	.08840	.02860	-.00400	.00060	-.00060	.27430	.01100	.04200	.07580	.08300
1.106	6.270	.24180	-.03670	-.00400	-.00140	-.00090	.26690	.01060	.04040	.07870	.07990
1.106	8.810	.40740	-.10790	-.00970	.00170	-.00240	.25070	.01050	.04010	.08080	.07700
1.106	11.160	.55393	-.16980	-.01330	.00110	-.00350	.23820	.01060	.04030	.08450	.07480
1.106	-1.360	-.26860	.18480	.00170	-.00160	.00060	.28830	.01180	.04490	.07870	.09520
	GRADIENT	.06756	-.02951	-.00114	.00041	-.00026	-.00272	-.00013	-.00047	-.00044	-.00115

RUN NO. 64/ 0 RN/L = 8.86 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.149	-14.680	-1.24720	.55970	.01510	-.00960	.00620	.27550	.01250	.04760	.07730	.09360
1.149	-11.990	-1.00920	.46400	.01340	-.00830	.00550	.29060	.01120	.04250	.08130	.08950
1.149	-9.260	-.80250	.38860	.01220	-.00840	.00420	.29360	.01070	.04080	.07990	.08860
1.149	-6.610	-.61880	.32220	.00830	-.00740	.00310	.29490	.01060	.04040	.07610	.08640
1.149	-3.990	-.44970	.25290	.00560	-.00620	.00190	.28970	.01120	.04270	.07600	.08840
1.149	-1.400	-.27960	.19620	.00230	-.00490	.00100	.29250	.01060	.04030	.07310	.08330
1.149	1.140	-.11140	.12200	-.00010	-.00440	.00070	.28310	.01040	.03980	.07100	.08050
1.149	3.680	.06220	.03920	-.00310	-.00310	.00000	.27450	.01040	.03960	.07060	.07780
1.149	6.300	.24330	-.03310	-.00720	-.00250	-.00150	.26550	.00990	.03770	.07010	.07[illegible]
1.149	8.870	.41040	-.10610	-.00930	-.00210	-.00220	.25220	.00970	.03880	.07200	.07100
1.149	11.260	.55220	-.15950	-.01380	-.00160	-.00400	.24300	.00940	.03570	.07340	.06700
1.149	-1.360	-.27410	.19670	.00120	-.00540	.00110	.29430	.01030	.03920	.07250	.08050
	GRADIENT	.06669	-.02981	-.00112	.00038	-.00023	-.00215	-.00010	-.00038	-.00072	-.00136

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+Z13 (RIN017) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 55/ 0 RN/L = 6.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.252	-15.280	-1.34520	.37450	.00440	-.00400	.00570	.28450	.01360	.05180	.07870	.09430
1.252	-12.440	-1.06400	.45700	.00440	-.00320	.00510	.29360	.01280	.04860	.08080	.08590
1.252	-9.520	-.79890	.34980	.00200	-.00230	.00360	.29600	.01220	.04640	.07880	.08890
1.252	-6.710	-.56880	.25670	-.00060	-.00120	.00210	.29230	.01180	.04490	.07730	.08810
1.252	-3.990	-.36350	.17310	-.00190	-.00180	.00120	.29010	.01170	.04460	.07480	.08530
1.252	-1.280	-.16780	.09400	-.00580	.00020	.00040	.28990	.01120	.04260	.07050	.08070
1.252	1.280	-.00460	.03280	-.00700	.00030	-.00010	.29520	.01130	.04250	.07070	.08110
1.252	3.780	.14050	-.02820	-.00890	-.00030	-.00110	.27890	.01140	.04330	.07350	.07960
1.252	6.390	.29760	-.08590	-.00910	-.00080	-.00200	.27390	.01120	.04220	.07490	.07760
1.252	8.970	.45740	-.14870	-.01130	-.00120	-.00260	.26650	.01070	.04080	.07450	.07330
1.252	11.400	.59540	-.18950	-.01490	.00000	-.00400	.25510	.01100	.04230	.07710	.07270
1.252	-1.260	-.16350	.09470	-.00510	-.00040	.00050	.29120	.01130	.04320	.07100	.08170
	GRADIENT	.05484	-.02573	-.00086	.00018	-.00029	-.00147	-.00004	-.00019	-.00015	-.00065

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+Z13 (R1N018) (19 JUN 75)

REFERENCE DATA

SREF = 2650.0000 SQ. FT XMRP = 576.0000 IN. XT
LREF = 1290.0000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 56/ 0 RN/L = 5.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.798	-11.420	-.22590	.12130	.47870	-.20060	.06130	.11690	.01040	.03980	.07590	.09470
.798	-9.270	-.23440	.12800	.39970	-.17580	.05480	.12430	.01010	.03860	.07350	.09380
.798	-7.030	-.23950	.13340	.30620	-.13840	.04280	.13300	.00980	.03720	.06930	.08980
.798	-4.790	-.25090	.14280	.21080	-.09660	.02940	.13970	.00980	.03720	.06610	.08710
.798	-2.550	-.26420	.15440	.11530	-.05370	.01570	.14640	.00930	.03560	.06200	.08550
.798	-.320	-.26680	.15810	.02210	-.01160	.00410	.15250	.00880	.03370	.05710	.08000
.798	1.890	-.25190	.14450	-.06540	.02880	-.00660	.16070	.00930	.03530	.05350	.07800
.798	4.090	-.25960	.14780	-.15320	.06780	-.01910	.15790	.00990	.03760	.05100	.08200
.798	6.340	-.24840	.13700	-.24730	.11080	-.03230	.15470	.01050	.04020	.04930	.08610
.798	8.550	-.24610	.13180	-.33820	.14860	-.04440	.15220	.01070	.04080	.04840	.09020
.798	10.660	-.23870	.12460	-.42000	.17820	-.05300	.14700	.01090	.04170	.04880	.09310
.798	-.310	-.27490	.16210	.02500	-.01340	.00430	.14990	.00910	.03490	.05810	.08110
	GRADIENT	-.00024	.00001	-.04095	.01854	-.00538	.00229	.00001	.00002	-.00174	-.00076

RUN NO. 57/ 0 RN/L = 6.35 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.901	-11.670	-.21760	.11260	.51180	-.21790	.07290	.13280	.01190	.04540	.07900	.09730
.901	-9.480	-.21870	.11530	.41410	-.17970	.06030	.14740	.01150	.04370	.07610	.09490
.901	-7.200	-.21960	.12140	.31980	-.14230	.04820	.15760	.01110	.04240	.07320	.09140
.901	-4.910	-.24270	.14190	.22130	-.10090	.03260	.16580	.01070	.04080	.06860	.08850
.901	-2.610	-.25450	.15320	.12110	-.05470	.01650	.17080	.01050	.04020	.06550	.08510
.901	-.320	-.26610	.15570	.02180	-.00950	.00250	.16140	.01260	.04780	.06260	.07900
.901	1.920	-.25550	.15010	-.07840	.03790	-.01100	.17510	.01090	.04140	.05890	.08190
.901	4.150	-.25470	.14800	-.16580	.07560	-.02350	.17770	.01140	.04350	.05460	.08510
.901	6.450	-.24010	.13470	-.26400	.11930	-.03840	.17720	.01190	.04530	.05230	.08980
.901	8.740	-.22990	.12210	-.35620	.15740	-.05200	.17460	.01250	.04760	.05180	.09190
.901	10.860	-.22530	.11600	-.44410	.19180	-.06460	.16890	.01280	.04880	.04990	.09440
.901	-.320	-.26490	.15750	.02300	-.01080	.00280	.16920	.01040	.03970	.06230	.08060
	GRADIENT	-.00112	.00041	-.04299	.01968	-.00617	.00123	.00008	.00029	-.00153	-.00045

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740TS+Z13 (R1N018) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 59/ 0 RN/L = 6.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.046	-12.040	-.18690	.10780	.54540	-.22520	.08290	.24480	.01270	.04850	.08810	.09480
1.046	-9.700	-.19510	.11760	.43660	-.18900	.06890	.25030	.01280	.04880	.08910	.09530
1.046	-7.330	-.20570	.13180	.33150	-.14940	.05470	.26430	.01240	.04710	.08680	.09090
1.046	-5.000	-.22950	.15410	.22700	-.10540	.03740	.27350	.01220	.04550	.08500	.09020
1.046	-2.660	-.24670	.16970	.12810	-.06140	.02100	.27790	.01210	.04630	.08400	.08990
1.046	-.340	-.25510	.17750	.02060	-.01020	.00370	.27700	.01220	.04640	.08330	.08810
1.046	1.970	-.24950	.17220	-.08250	.03960	-.01170	.28340	.01240	.04710	.07860	.08870
1.046	4.270	-.24250	.16280	-.17990	.08430	-.02750	.29490	.01270	.04820	.07370	.09130
1.045	6.600	-.22630	.14530	-.28050	.12700	-.04490	.28690	.01270	.04830	.06820	.09280
1.046	8.990	-.21290	.13100	-.37810	.16330	-.05970	.28930	.01220	.04640	.06250	.09180
1.046	11.200	-.20650	.11880	-.48110	.20350	-.07330	.27960	.01290	.04900	.05050	.09310
1.046	-.320	-.25420	.17690	.02250	-.01200	.00410	.28110	.01170	.04450	.08090	.08540
	GRADIENT	-.00125	.00087	-.04422	.02073	-.00701	.00122	.00005	.00017	-.00121	.00004

RUN NO. 60/ 0 RN/L = 6.82 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.103	-12.140	-.18220	.10660	.55540	-.22970	.08510	.26530	.01230	.04700	.08420	.09300
1.103	-9.790	-.18770	.11550	.44270	-.19020	.07130	.27390	.01210	.04620	.08290	.09130
1.103	-7.380	-.20110	.13120	.33460	-.15140	.05640	.28350	.01190	.04550	.08060	.08780
1.103	-5.030	-.22300	.15390	.22740	-.10540	.03920	.29120	.01170	.04480	.07940	.08780
1.103	-2.670	-.23930	.16720	.12560	-.06060	.02140	.29880	.01150	.04380	.07760	.08620
1.107	-.330	-.24860	.17770	.02430	-.01490	.00440	.29800	.01170	.04440	.07710	.08670
1.103	1.980	-.24320	.17250	-.07380	.03020	-.01120	.30180	.01200	.04570	.07410	.08730
1.103	4.300	-.23350	.16120	-.16990	.07190	-.02720	.30680	.01190	.04520	.06800	.08820
1.103	6.650	-.22530	.14810	-.27440	.11760	-.04530	.30540	.01220	.04630	.06390	.09150
1.103	9.050	-.21120	.13220	-.37720	.15680	-.06100	.30330	.01220	.04640	.05080	.09260
1.103	11.310	-.19600	.11580	-.47620	.18940	-.07470	.30000	.01200	.04550	.05690	.08950
1.103	-.310	-.25080	.17900	.02480	-.01560	.00440	.29860	.01180	.04480	.07770	.08720
	GRADIENT	.00098	-.00099	-.04240	.01906	-.00695	.00120	.00006	.00024	-.00137	.00028

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740TS+Z13 (R1N018) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 58/ 1 RN/L = 6.85 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.264	-12.400	-.16690	.07620	.58340	-.23640	.08920	.27000	.01180	.04480	.07630	.08620
1.264	-9.990	-.15170	.06950	.45620	-.18740	.07270	.28040	.01120	.04260	.07360	.08210
1.264	-7.520	-.14570	.07230	.33250	-.13790	.05590	.28640	.01100	.04190	.07140	.07890
1.264	-5.090	-.14260	.07580	.21650	-.08900	.03760	.28820	.01050	.03990	.07140	.07880
1.264	-2.700	-.13900	.07560	.11380	-.04700	.01950	.29040	.01030	.03910	.07030	.07540
1.264	-.340	-.14460	.08160	.01580	-.00590	.00360	.29250	.01000	.03800	.06730	.07530
1.264	2.000	-.14310	.07940	-.07780	.03320	-.01140	.29600	.01020	.03880	.06520	.07630
1.264	4.360	-.14790	.08010	-.17030	.06950	-.02730	.30120	.01020	.03900	.06050	.07790
1.264	6.770	-.15570	.08080	-.27560	.11220	-.04530	.30070	.01060	.04030	.05810	.08130
1.264	9.230	-.16040	.07700	-.39440	.15870	-.06290	.29770	.01110	.04250	.05710	.08490
1.264	11.560	-.17340	.07900	-.51620	.20640	-.07930	.29320	.01170	.04450	.05730	.08780
1.264	-.310	-.14550	.08270	.01570	-.00640	.00370	.29250	.01000	.03800	.06750	.07510
	GRADIENT	-.00107	.00048	-.04022	.01552	-.00562	.00153	-.00000	.00002	-.00134	.00023

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74OTS+Z13 (R14019) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 44/ 0 RN/L = 5.88 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.801	-12.680	-.92700	.37620	.00270	-.00070	.00530	.11740	.01040	.03980	.06900	.08040
.801	-10.380	-.75390	.30580	.00200	.00030	.00400	.12030	.01000	.03810	.06540	.08530
.801	-7.960	-.59190	.24200	.00100	.00070	.00330	.12380	.00960	.03670	.05960	.08140
.801	-5.620	-.44170	.17770	-.00410	.00360	.00150	.12510	.00930	.03530	.05530	.08000
.801	-3.270	-.30020	.12030	-.00820	.00450	.00080	.12440	.00910	.03470	.05550	.07810
.801	-.870	-.15850	.08710	-.01030	.00[illegible]	-.00010	.12710	.00870	.03300	.05540	.07410
.801	1.430	-.08710	.01880	-.01830	.00800	-.00030	.12250	.00880	.03280	.05980	.07480
.801	3.790	.11320	-.02870	-.00050	.03110	-.00950	.11820	.00830	.03150	.05590	.07380
.801	6.190	.25200	-.07010	-.02200	.00900	-.00210	.10870	.00840	.03190	.06020	.07260
.801	8.600	.40460	-.12700	-.02620	.00990	-.00380	.10090	.00830	.03180	.06300	.07020
.801	10.730	.52000	-.17260	-.02910	.01090	-.00440	.09630	.00840	.03200	.06330	.07110
.801	-.890	-.16000	.06930	-.01400	.00710	-.00040	.12560	.00870	.03330	.05570	.07460
	GRADIENT	.05842	-.02085	-.00549	.00342	-.00132	-.00099	-.00011	-.00042	.00020	-.00055

RUN NO. 45/ 0 RN/L = 6.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.902	-13.340	-1.03410	.42820	-.00750	.00640	.00390	.13010	.01210	.04510	.06920	.09880
.902	-10.860	-.82210	.33690	-.00320	.00550	.00340	.13660	.01120	.04290	.06880	.09320
.902	-8.330	-.63260	.25900	-.01580	.01220	.00150	.14010	.01070	.04090	.06390	.08910
.902	-5.830	-.45510	.18460	-.02300	.01500	-.00050	.14110	.01030	.03940	.05980	.08440
.902	-3.380	-.28940	.11660	-.02640	.01740	-.00160	.14510	.00990	.03760	.05840	.07940
.902	-.950	-.13640	.04550	-.02750	.01610	-.00280	.13990	.00960	.03660	.05900	.07730
.902	1.410	.00900	-.01230	-.03080	.01720	-.00400	.14060	.00930	.03550	.05750	.07640
.902	3.780	.13570	-.05660	-.03280	.01780	-.00450	.13960	.00910	.03480	.05980	.07550
.902	6.240	.27310	-.09690	-.03370	.01670	-.00520	.13200	.00920	.03510	.06390	.07680
.902	8.690	.41130	-.13470	-.03640	.01620	-.00530	.12050	.00940	.03580	.07250	.07950
.902	10.960	.55370	-.19350	-.02950	.01120	-.00530	.12080	.00910	.03480	.07190	.07220
.902	-.950	-.13170	.04460	-.01810	.01130	-.00140	.14310	.00940	.03590	.05820	.07610
	GRADIENT	.05960	-.02423	-.00094	.00010	-.00042	-.00067	-.00011	-.00040	.00011	-.00053

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74OTS+213 (R1N019) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 47/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.999	-14.030	-1.16110	.51350	.00950	-.00070	.00490	.20380	.01580	.06000	.08610	.10860
.999	-11.360	-.91430	.40390	.00420	.00220	.00350	.20600	.01450	.05510	.08590	.10390
.999	-8.740	-.70390	.31740	-.00030	.00450	.00230	.21950	.01370	.05210	.08580	.09910
.999	-6.190	-.51920	.24350	-.00240	.00470	.00180	.22540	.01320	.05020	.08330	.09330
.999	-3.620	-.34360	.17000	-.00530	.00500	.00120	.21480	.01260	.04790	.07710	.09030
.999	-1.100	-.17550	.10210	-.01000	.00770	.00030	.21610	.01150	.04380	.07460	.08510
.999	1.280	-.03360	.04120	-.01310	.00950	-.00050	.21870	.01240	.04730	.07790	.08950
.999	3.770	.13430	-.03450	-.01750	.01070	-.00210	.21170	.01240	.04720	.08020	.08940
.999	6.270	.29440	-.10170	-.01920	.01040	-.00330	.21160	.01220	.04660	.08380	.08560
.999	8.810	.44700	-.15020	-.02160	.00950	-.00420	.19760	.01230	.04700	.08730	.08700
.999	11.090	.58060	-.20220	-.01930	.00520	-.00300	.18790	.01210	.04600	.08680	.08280
.999	-1.070	-.17710	.10730	-.01090	.00810	.00010	.21660	.01230	.04700	.07880	.08920
	GRADIENT	.06419	-.02747	-.00151	.00065	-.00044	-.00028	.00001	.00005	.00051	.00006

RUN NO. 48/ 0 RN/L = 6.58 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.047	-14.200	-1.17700	.51600	.01220	-.00220	.00550	.22550	.01500	.05720	.08810	.10420
1.047	-11.580	-.93240	.41260	.00580	.00110	.00420	.23770	.01290	.04910	.08750	.09560
1.047	-8.860	-.70610	.31690	.00710	.00220	.00300	.24470	.01180	.04510	.08330	.09010
1.047	-6.260	-.51580	.24090	-.00160	.00410	.00190	.24550	.01190	.04530	.08120	.08720
1.047	-3.700	-.34510	.17370	-.00520	.00550	.00150	.24760	.01150	.04370	.07930	.08400
1.047	-1.130	-.18050	.11000	-.00920	.00730	.00030	.24360	.01130	.04300	.07980	.08300
1.047	1.290	-.01700	.03310	-.01240	.00860	-.00090	.24670	.01120	.04270	.07570	.08170
1.047	3.770	.14310	-.03970	-.01540	.00910	-.00190	.24390	.01070	.04080	.07540	.07750
1.047	6.320	.29850	-.09420	-.01620	.00790	-.00270	.23070	.01120	.04260	.08010	.07940
1.047	8.860	.44960	-.14850	-.01890	.00800	-.00340	.22560	.01080	.04130	.08250	.07340
1.047	11.140	.57690	-.19760	-.01930	.00550	-.00300	.21440	.01130	.04320	.08510	.07220
1.047	-1.100	-.17420	.10890	-.01050	.00770	.00010	.24600	.01110	.04220	.07890	.08230
	GRADIENT	.06556	-.02886	-.00136	.00049	-.00046	-.00033	-.00010	-.00036	-.00063	-.00084

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740T5+Z13 (RIN019) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 OPPINC = .000
SPOILR = .000

RUN NO. 49/ 0 RN/L = 6.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.101	-14.480	-1.21700	.53900	.01370	-.00110	.00520	.25120	.01460	.05570	.08280	.09580
1.101	-11.760	-.95860	.42700	.01180	-.00130	.00430	.25400	.01290	.04930	.08480	.09510
1.101	-9.020	-.73490	.33660	.00940	-.00150	.00330	.25930	.01220	.04640	.08400	.09120
1.101	-6.400	-.54410	.26250	.00950	-.00210	.00300	.26150	.01180	.04500	.08100	.08920
1.101	-3.800	-.37000	.19300	.00250	.00190	.00160	.26440	.01140	.04360	.07790	.08560
1.101	-1.200	-.19460	.12320	-.00140	.00430	.00090	.26440	.01080	.04120	.07600	.08390
1.101	1.280	-.03060	.04800	-.00450	.00510	-.00030	.26350	.01080	.04130	.07330	.08020
1.101	3.770	.13720	-.03070	-.00910	.00690	-.00130	.25790	.01050	.04150	.07450	.07650
1.101	6.350	.30250	-.09090	-.01310	.00760	-.00330	.25170	.01050	.04000	.07620	.07470
1.101	8.910	.45800	-.15230	-.01810	.01010	-.00330	.24240	.01020	.03900	.07690	.06900
1.101	11.220	.59850	-.20180	-.01820	.00760	-.00340	.22910	.01050	.04020	.08230	.06720
1.101	-1.170	-.18640	.12080	-.00380	.00530	.00020	.26230	.01090	.04170	.07650	.08440
	GRADIENT	.06692	-.02962	-.00150	.00063	-.00039	-.00081	-.00010	-.00036	-.00051	-.00122

RUN NO. 50/ 0 RN/L = 6.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.149	-14.730	-1.24370	.53850	.01070	-.00350	.00610	.25790	.01390	.05280	.08720	.09840
1.149	-12.000	-.98830	.43120	.00890	-.00410	.00590	.26010	.01280	.04890	.08910	.09370
1.149	-9.200	-.75490	.33750	.00930	-.00430	.00450	.26110	.01250	.04760	.08820	.09340
1.149	-6.510	-.55530	.26130	.00640	-.00380	.00300	.26350	.01180	.04510	.08420	.08970
1.149	-3.870	-.37130	.19250	.00190	-.00130	.00140	.26750	.01120	.04250	.07950	.08600
1.149	-1.220	-.18870	.12250	.00080	-.00240	.00160	.26730	.01090	.04160	.07760	.08400
1.149	1.300	-.01660	.04580	-.00090	-.00200	.00090	.26470	.01100	.04190	.07570	.08310
1.149	3.820	.14970	-.03120	-.00490	-.00060	-.00060	.26150	.01110	.04220	.07750	.08000
1.149	6.460	.32200	-.09670	-.00560	-.00080	-.00150	.25780	.01090	.04150	.07790	.07750
1.149	8.990	.47340	-.15890	-.00930	.00020	-.00230	.24760	.01120	.04260	.08100	.07190
1.149	11.350	.60950	-.20480	-.01600	.00260	-.00340	.23240	.01160	.04410	.08390	.07510
1.149	-1.160	-.17980	.12110	-.00180	-.00190	.00100	.26550	.01050	.04000	.07600	.08150
	GRADIENT	.06781	-.02921	-.00086	.00010	-.00026	-.00080	-.00001	-.00002	-.00031	-.00074

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+Z13 (RIN020) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 55/ 0 RN/L = 5.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.800	-11.400	-.14320	.05750	.48370	-.20540	.06330	.09730	.01060	.04040	.07560	.09100
.800	-9.270	-.13860	.05620	.39820	-.17610	.05560	.10660	.00990	.03760	.07200	.08720
.800	-7.010	-.13950	.05790	.30720	-.13970	.04400	.11330	.00970	.03690	.06870	.08380
.800	-4.790	-.14390	.06160	.21390	-.09910	.03050	.11800	.00940	.03600	.06470	.08060
.800	-2.550	-.15320	.06810	.11630	-.05500	.01610	.12500	.00900	.03450	.06110	.07840
.800	-.310	-.15810	.07190	.02340	-.01190	.00460	.12880	.00060	.03290	.05620	.07400
.800	1.880	-.14040	.05860	-.07000	.03280	-.00750	.13940	.00890	.03380	.05130	.07330
.800	4.090	-.14080	.05700	-.15550	.07140	-.01900	.14360	.00930	.03540	.04840	.07520
.800	6.340	-.14290	.05640	-.25470	.11800	-.03410	.13480	.01010	.03830	.04660	.08070
.800	8.600	-.15130	.05990	-.35300	.15970	-.04720	.13290	.01050	.03980	.04640	.08650
.800	10.690	-.14700	.05480	-.43310	.18870	-.05630	.13050	.01080	.04110	.04610	.08900
.800	-.310	-.15640	.07190	.02480	-.01310	.00440	.12580	.00910	.03470	.05820	.07590
	GRADIENT	.00085	-.00084	-.04169	.01932	-.00553	.00295	-.00001	-.00009	-.00191	-.00072

RUN NO. 54/ 0 RN/L = 6.25 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.900	-11.660	-.13170	.05160	.52390	-.22950	.07430	.11880	.01200	.04560	.08020	.09310
.900	-9.470	-.11860	.04470	.42400	-.19010	.06070	.12950	.01160	.04410	.07750	.09020
.900	-7.170	-.10950	.04020	.32510	-.15060	.04790	.13660	.01090	.04150	.07430	.08610
.900	-4.880	-.10690	.03960	.22740	-.10880	.03310	.13940	.01060	.04040	.07070	.08330
.900	-2.600	-.10500	.03820	.12510	-.06090	.01690	.14590	.00990	.03770	.06520	.07640
.900	-.300	-.11100	.03950	.01440	-.00560	.00170	.14640	.00960	.03670	.06190	.07220
.900	1.940	-.10390	.03320	-.09150	.04810	-.01190	.15150	.01000	.03820	.05750	.07430
.900	4.190	-.10690	.03410	-.18440	.09020	-.02490	.15450	.01090	.04140	.05330	.07750
.900	6.460	-.10960	.03580	-.28040	.13320	-.03870	.15550	.01120	.04250	.05020	.08360
.900	8.770	-.12130	.04140	-.37880	.17560	-.05380	.15590	.01210	.04630	.05120	.08900
.900	10.910	-.12930	.04610	-.46930	.21210	-.06710	.15410	.01230	.04700	.04940	.09080
.900	-.330	-.10990	.03980	.01930	-.00840	.00260	.14910	.00950	.03630	.06100	.07150
	GRADIENT	.00005	-.00070	-.04587	.02236	-.00639	.00158	.00003	.00011	-.00187	-.00061

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740TS+Z13 (R1N020) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 52/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.048	-12.040	-.16020	.09150	.57350	-.24980	.08900	.22170	.01340	.05100	.09260	.09710
1.048	-9.740	-.14560	.08380	.45630	-.20480	.07380	.23410	.01260	.04800	.09030	.09290
1.048	-7.330	-.13790	.08050	.34290	-.15870	.05800	.24440	.01220	.04640	.08880	.08780
1.048	-4.990	-.14140	.08720	.23340	-.11040	.04010	.24850	.01190	.04530	.08760	.08550
1.048	-2.660	-.14920	.09530	.12770	-.06170	.02270	.25190	.01130	.04320	.08560	.08320
1.048	-.310	-.15630	.10180	.01850	-.00900	.00410	.25200	.01100	.04200	.08330	.07990
1.048	1.990	-.15350	.09990	-.08900	.04430	-.01350	.25790	.01150	.04370	.07920	.08150
1.048	4.280	-.15270	.09440	-.19020	.09300	-.03000	.25750	.01240	.04710	.07580	.08530
1.048	6.640	-.14730	.08530	-.29590	.13930	-.04810	.26010	.01300	.04940	.07190	.09020
1.048	9.030	-.14960	.08410	-.40100	.18200	-.06400	.26540	.01250	.04750	.06480	.08940
1.048	11.270	-.16110	.08900	-.50650	.22090	-.07760	.25990	.01310	.05000	.06340	.09280
1.048	-.260	-.15960	.10450	.01930	-.01090	.00410	.26050	.01140	.04330	.08400	.08050
	GRADIENT	-.00117	.00078	-.04590	.02212	-.00751	.00103	.00005	.00017	-.00129	-.00009

RUN NO. 51/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.098	-12.160	-.15230	.08000	.57770	-.24380	.09230	.24590	.01380	.05250	.09040	.09880
1.098	-9.810	-.14980	.08190	.45250	-.19520	.07530	.25400	.01380	.05240	.08880	.09520
1.098	-7.370	-.15080	.08790	.33760	-.15100	.05830	.25800	.01360	.05200	.08930	.09210
1.098	-5.020	-.16100	.10050	.22680	-.10370	.04040	.26160	.01300	.04940	.08860	.09020
1.098	-2.660	-.16560	.10670	.12250	-.05810	.02220	.25320	.01240	.04730	.08800	.08920
1.098	-.300	-.17490	.11580	.01680	-.00950	.00380	.25530	.01210	.04620	.08660	.08840
1.098	2.000	-.16920	.11100	-.08570	.03880	-.01340	.26980	.01280	.04860	.08290	.09990
1.098	4.320	-.16610	.10530	-.18360	.08270	-.03040	.27500	.01280	.04890	.07760	.09080
1.098	6.720	-.16340	.09740	-.29300	.13120	-.04900	.27590	.01320	.05040	.07390	.09520
1.098	9.110	-.16120	.09040	-.40190	.17370	-.06580	.27350	.01380	.05240	.07130	.09920
1.098	11.410	-.16410	.08600	-.51180	.21140	-.08110	.27440	.01380	.05270	.06830	.09840
1.098	-.300	-.17480	.11620	.01770	-.01090	.00370	.26230	.01230	.04680	.08710	.08960
	GRADIENT	.00017	-.00038	-.04393	.02025	-.00753	.00167	.00008	.00031	-.00150	.00027

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740TS+Z13 (RIN020) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 53/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.251	-12.380	-.14660	.06490	.58920	-.24240	.09300	.25910	.01210	.04590	.08180	.08680
1.251	-9.980	-.12940	.05710	.45660	-.18880	.07490	.26580	.01200	.04580	.07060	.08360
1.251	-7.490	-.12020	.05770	.33140	-.13810	.05860	.27290	.01170	.04460	.07770	.07930
1.251	-5.080	-.11970	.06250	.21470	-.08890	.03790	.27230	.01100	.04200	.07790	.07990
1.251	-2.690	-.11750	.05300	.11340	-.04770	.01940	.27320	.01080	.04130	.07670	.07820
1.251	- 310	-.12040	.06640	.01320	-.00430	.00330	.27560	.01040	.03950	.07220	.07690
1.251	2.000	-.12020	.06520	-.08100	.03510	-.01230	.27910	.01080	.04120	.06990	.07820
1.251	4.370	-.12620	.05570	-.17870	.07630	-.02950	.28380	.01110	.04230	.06580	.08040
1.251	6.790	-.13320	.06690	-.28750	.12140	-.04820	.28260	.01150	.04390	.06400	.08520
1.251	9.260	-.13780	.05320	-.40510	.16700	-.06540	.27940	.01190	.04540	.06400	.08950
1.251	11.600	-.14900	.06450	-.52730	.21380	-.08180	.27760	.01220	.04640	.06210	.08980
1.251	-.300	-.11470	.06240	.01340	-.00570	.00340	.27810	.01010	.03840	.07100	.07520
	GRADIENT	-.00110	.00030	-.04132	.01756	-.00691	.00150	.00006	.00020	-.00149	.00034

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (RIN021) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 15/ 0 RN/L = 5.93 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.798	-6.890	-.55900	.24100	.00170	-.00020	.00240	.13430	.01040	.03880	.05740	.08030
.798	-4.710	-.43750	.19270	.00580	-.00350	.00290	.14010	.00940	.03580	.05640	.07250
.798	-2.470	-.30460	.14360	-.00170	-.00020	.00230	.14020	.00930	.03540	.05670	.07090
.798	-.270	-.17400	.09140	-.00500	.00030	.00170	.14110	.00880	.03370	.05620	.06880
.798	1.920	-.04170	.04560	-.00670	.00060	.00140	.13750	.00880	.03360	.05580	.06910
.798	4.180	.09330	.00240	-.01350	.00350	.00080	.13110	.00890	.03380	[illegible]	.06950
.798	6.410	.23490	-.04940	-.01510	.00310	.00120	.12070	.00890	.03380	.05910	.06790
.798	-.270	-.16650	.08700	-.00960	.00220	.00070	.14010	.00940	.03590	.05670	.07540
	GRADIENT	.05974	-.02159	-.00197	.00067	-.00023	-.00094	-.00007	-.00026	-.00008	-.00035

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+213 (R1N021) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 16/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.897	-7.010	-.57150	.25030	-.00160	.00170	.00050	.16760	.01120	.04260	.06370	.08220
.897	-4.740	-.42030	.19260	-.00500	.00340	-.00020	.15970	.01090	.04150	.05990	.08060
.897	-2.510	-.28460	.13120	-.00950	.00510	-.00110	.16410	.01030	.03920	.06000	.07990
.897	-.270	-.14840	.07480	-.00880	.00280	-.00100	.15980	.01040	.03970	.06070	.08050
.897	1.960	-.00530	.01590	-.01370	.00560	-.00120	.15350	.00950	.03540	.05030	.07490
.897	4.190	.13340	-.03510	-.01680	.00650	-.00280	.14760	.00950	.03570	.06110	.07500
.897	6.510	.27390	-.07770	-.02090	.00730	-.00280	.14130	.00980	.03730	.06480	.07620
.897	-.270	-.14510	.07350	-.01180	.00410	-.00150	.16480	.01010	.03960	.06000	.07930
	GRADIENT	.06210	-.02555	-.00124	.00031	-.00024	-.00245	-.00015	-.00056	.00012	-.00073

RUN NO. 18/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.996	-7.050	-.59580	.28340	.00720	-.00090	.00180	.23960	.01130	.04320	.07470	.08430
.996	-4.750	-.43760	.22080	.00470	-.00040	.00150	.24130	.01090	.04150	.07120	.08060
.996	-2.440	-.28950	.16210	.00270	-.00020	.00090	.24060	.01040	.03970	.06900	.07800
.996	-.190	-.15160	.10260	.00040	-.00020	.00040	.24800	.01090	.04140	.07180	.07980
.996	2.040	.00350	.03170	-.00170	.00030	.00030	.23250	.01080	.04110	.06950	.08190
.996	4.300	.14820	-.03620	-.00510	.00050	.00010	.23400	.01150	.04400	.07410	.08330
.996	6.610	.30020	-.09390	-.00690	.00000	-.00050	.21940	.01100	.04200	.07440	.08130
.996	-.200	-.14700	.09620	.00130	-.00090	.00050	.23680	.01010	.03850	.06730	.07700
	GRADIENT	.06486	-.02853	-.00106	.00010	-.00015	-.00100	.00007	.00028	.00028	.00041

RUN NO. 19/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.049	-7.070	-.60110	.28720	.00390	.00080	.00150	.27200	.01280	.04870	.08140	.08470
1.049	-4.760	-.44150	.22630	.00230	.00080	.00110	.27440	.01260	.04800	.07850	.08040
1.049	-2.440	-.29810	.17170	-.00120	.00210	.00060	.27520	.01250	.04740	.07640	.07830
1.049	-.180	-.15250	.10760	.00030	-.00040	.00050	.26930	.01200	.04570	.07460	.08100
1.049	2.100	.00040	.04220	-.00220	-.00040	-.00010	.26550	.01170	.04450	.07060	.07950
1.049	4.360	.14880	-.02840	-.00470	.00010	-.00010	.25940	.01230	.04690	.07270	.07910
1.049	6.690	.30430	-.08690	-.00740	.00000	-.00090	.25260	.01230	.04680	.07430	.07610
1.049	-.180	-.15290	.10720	.00080	-.00080	.00050	.27190	.01180	.04500	.07340	.07940
	GRADIENT	.06493	-.02804	-.00066	-.00017	-.00014	-.00174	-.00005	-.00022	-.00076	-.00006

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (R1N021) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 20/ 0 RN/L = 6.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.103	-7.150	-.61880	.29660	.00340	.00130	.00160	.28350	.01310	.05000	.08260	.08800
1.103	-4.800	-.45390	.23250	.00280	.00020	.00130	.28520	.01280	.04870	.08080	.08440
1.103	-2.460	-.30350	.17410	.00150	.00040	.00100	.28550	.01270	.04850	.07820	.08270
1.103	-.180	-.15740	.11110	-.00140	.00100	.00050	.27800	.01260	.04800	.07700	.08750
1.103	2.120	-.00390	.04660	-.00260	-.00030	.00010	.27300	.01300	.04930	.07460	.08610
1.103	4.380	.14280	-.02080	-.00630	-.00010	-.00050	.27190	.01290	.04910	.07370	.08070
1.103	6.720	.29370	-.07540	-.00980	.00200	-.00170	.26770	.01270	.04850	.07360	.07600
1.103	-.180	-.15640	.11070	-.00190	.00110	.00030	.27870	.01260	.04820	.07690	.08750
	GRADIENT	.06508	-.02764	-.00097	-.00006	-.00020	-.00170	.00002	.00007	-.00078	-.00017

RUN NO. 21/ 0 RN/L = 6.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.146	-7.240	-.64200	.30270	.00590	-.00160	.00230	.28910	.01340	.05100	.08420	.08840
1.146	-4.850	-.46500	.23470	.00290	.00060	.00140	.28600	.01360	.05180	.08320	.08740
1.146	-2.470	-.30170	.17120	.00100	.00050	.00120	.29260	.01370	.05220	.07940	.08270
1.146	-.140	-.14560	.10860	-.00020	-.00010	.00120	.28780	.01360	.05180	.07810	.08430
1.146	2.140	.00810	.04110	-.00200	-.00020	.00040	.28140	.01360	.05180	.07660	.08430
1.146	4.430	.15620	-.02360	-.00580	.00040	-.00100	.27990	.01360	.05190	.07750	.08040
1.146	6.770	.30980	-.09200	-.01000	.00280	-.00220	.27380	.01400	.05320	.07950	.07680
1.146	-.150	-.14710	.10910	.00150	-.00190	.00130	.29080	.01350	.05150	.07740	.08250
	GRADIENT	.06700	-.02791	-.00088	-.00005	-.00024	-.00100	-.00000	-.00001	-.00062	-.00054

RUN NO. 17/ 0 RN/L = 6.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.252	-7.300	-.60760	.26750	.00110	.00000	.00210	.28800	.01330	.05060	.07670	.08240
1.252	-4.900	-.41930	.19040	-.00200	.00120	.00150	.28690	.01290	.04910	.07390	.08070
1.252	-2.510	-.25190	.12370	-.00640	.00360	.00120	.29080	.01320	.05020	.07060	.07720
1.252	-.150	-.09840	.06690	-.00780	.00450	.00040	.29360	.01320	.05040	.07060	.07380
1.252	2.140	.04270	.01110	-.00860	.00360	-.00040	.28980	.01320	.05020	.07030	.07550
1.252	4.460	.18250	-.04580	-.01210	.00470	-.00180	.28500	.01320	.05030	.07100	.07190
1.252	6.790	.32420	-.09930	-.01330	.00320	-.00180	.28140	.01350	.05160	.07260	.06950
1.252	-.150	-.09930	.06700	-.01060	.00580	.00000	.29390	.01300	.04950	.06930	.07180
	GRADIENT	.06412	-.02504	-.00095	.00030	-.00033	-.00024	.00003	.00010	-.00026	-.00083

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN021) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 41/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.459	-7.340	-.53280	.24550	-.00990	.00560	.00040	.30000	.01010	.03950	.05850	.06520
1.459	-4.930	-.40780	.17620	-.00790	.00370	.00070	.29040	.01180	.04500	.05640	.06450
1.459	-2.530	-.24130	.11210	-.01150	.00530	.00010	.29130	.01170	.04480	.05570	.06350
1.459	-.160	-.08870	.05690	-.01480	.00690	-.00060	.29620	.01010	.03860	.05540	.06280
1.459	2.170	.05550	.00430	-.01720	.00790	-.00120	.29420	.01020	.03880	.05500	.06100
1.459	4.470	.18740	-.04770	-.02070	.00930	-.00190	.29290	.01020	.03890	.05640	.05930
1.459	6.800	.32480	-.09960	-.02290	.01110	-.00240	.29390	.01020	.03880	.05560	.05560
1.459	-.180	-.09350	.05770	-.01290	.00610	-.00220	.29670	.01010	.03840	.05450	.06240
	GRADIENT	.06330	-.02365	-.00133	.00059	-.00028	.00034	-.00020	-.00079	-.00003	-.00055

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN022) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 39/ 0 RN/L = 6.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.798	-6.910	-.62450	.29690	.01110	-.00590	.00410	.14890	.00900	.03430	.06180	.07800
.798	-4.720	-.50120	.24660	.00930	-.00680	.00370	.15440	.00910	.03470	.05780	.07380
.798	-2.490	-.36480	.19380	.00190	-.00300	.00260	.15380	.00860	.03290	.06050	.07350
.798	-.280	-.23470	.14330	.00120	-.00350	.00220	.15520	.00820	.03140	.05920	.07120
.798	1.910	-.10790	.10150	-.00110	-.00220	.00160	.15080	.00840	.03190	.05920	.07160
.798	4.170	.02490	.05950	-.01020	.00060	.00120	.14260	.00850	.03260	.06070	.07260
.798	6.380	.16100	.00900	-.01450	.00170	.00060	.11920	.00850	.03230	.06260	.08460
.798	-.290	-.23760	.14440	-.00070	-.00260	.00180	.15480	.00830	.03180	.05970	.07160
	GRADIENT	.05502	-.02103	-.00190	.00070	-.00027	-.00120	-.00006	-.00023	.00020	-.00019

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (R1N022) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 38/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.902	-7.030	-.63470	.30200	.00380	-.00110	.00170	.16980	.00930	.03540	.06830	.08250
.902	-4.750	-.47550	.23850	.00150	-.00190	.00030	.18030	.00950	.03620	.06160	.08020
.902	-2.530	-.34940	.18370	-.00120	-.00070	-.00030	.17740	.00930	.03540	.06460	.07990
.902	-.300	-.22170	.13520	-.00160	-.00240	-.00040	.17120	.00[illegible]	.03310	.06630	.07870
.902	1.920	-.08020	.07800	-.01180	.00350	-.00090	.17000	.00870	.03330	.06610	.07810
.902	4.190	.06070	.02130	-.01480	.00620	-.00060	.16290	.00900	.03420	.06760	.07820
.902	6.480	.20660	-.02700	-.02150	.00820	-.00170	.15160	.00960	.03640	.07070	.08010
.902	-.290	-.21370	.13010	-.00730	.00070	-.00110	.18010	.00920	.03520	.06600	.08030
	GRADIENT	.06008	-.02419	-.00193	.00091	-.00011	-.00189	-.00007	-.00027	.00060	-.00026

RUN NO. 37/ 0 RN/L = 6.61 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.995	-7.110	-.65250	.32150	.01160	-.00370	.00200	.25140	.01040	.03950	.08110	.08530
.995	-4.790	-.49520	.26200	.01000	-.00340	.00170	.25360	.01020	.03890	.07890	.08230
.995	-2.490	-.35230	.20720	.00580	-.00190	.00120	.25270	.00950	.03630	.07650	.07860
.995	-.250	-.21840	.14960	.00230	-.00200	.00070	.24550	.00930	.03550	.07580	.07870
.995	2.010	-.07430	.09290	-.00050	.00010	.00040	.24310	.01100	.04190	.07730	.08680
.995	4.260	.07830	.01740	-.00720	.00330	.00030	.22880	.01080	.04120	.07740	.08590
.995	6.590	.23590	-.04130	-.01010	.00260	-.00040	.22750	.01160	.04420	.08060	.08760
.995	-.250	-.21920	.15030	.00340	-.00240	.00080	.24280	.00950	.03610	.07630	.07950
	GRADIENT	.06305	-.02670	-.00180	.00068	-.00016	-.00262	.00012	.00045	-.00010	.00068

RUN NO. 36/ 0 RN/L = 6.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.047	-7.130	-.65420	.32500	.00860	-.00150	.00170	.28620	.01240	.04720	.08370	.08640
1.047	-4.800	-.49520	.26530	.00700	-.00130	.00120	.29020	.01200	.04580	.08060	.08180
1.047	-2.470	-.35150	.21220	.00330	.00000	.00060	.28940	.01180	.04580	.07920	.07980
1.047	-.220	-.21750	.15630	.00200	-.00110	.00020	.28060	.01150	.04390	.07830	.08360
1.047	2.070	-.08840	.09310	-.00100	.00060	.00030	.26840	.01210	.04600	.07770	.08680
1.047	4.340	.09620	.01480	-.00640	.00260	-.00010	.26790	.01200	.04580	.07660	.08290
1.047	6.660	.24910	-.04260	-.00760	.00150	-.00050	.25530	.01220	.04640	.07870	.08180
1.047	-.210	-.21810	.15770	.00300	-.00150	.00040	.27580	.01180	.04490	.07980	.08540
	GRADIENT	.06432	-.02717	-.00136	.00037	-.00013	-.00287	.00001	.00004	-.00042	.00040

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (R1N022) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 33/ 0 RN/L = 6.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.100	-7.160	-.65140	.32440	.00440	.00290	.00180	.30510	.01170	.04470	.07740	.08330
1.100	-4.820	-.48960	.26230	.00480	.00130	.00160	.30740	.01130	.04290	.07440	.07940
1.100	-2.480	-.33920	.20480	.00370	.00030	.00070	.30650	.01110	.04220	.07250	.07820
1.100	-.200	-.19540	.14230	.00000	.00210	.00050	.29710	.01110	.04230	.07200	.08300
1.100	2.070	-.04220	.07690	-.00500	.00360	-.00020	.29060	.01120	.04260	.06950	.08200
1.100	4.360	.12860	.00650	-.00990	.00590	-.00210	.28420	.01160	.04410	.07170	.07860
1.100	6.700	.25540	-.05350	-.01130	.00540	-.00210	.28070	.01130	.04300	.07050	.07090
1.00	-.200	-.19590	.14290	-.00140	.00350	.00060	.29870	.01110	.04240	.07150	.08280
	GRADIENT	.06518	-.02789	-.00156	.00054	-.00028	-.00272	.00003	.00012	-.00037	.00010

RUN NO. 34/ 0 RN/L = 6.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.151	-7.260	-.67410	.32910	.01120	-.00610	.00290	.30640	.01290	.04920	.08640	.08900
1.151	-4.870	-.50180	.26350	.00730	-.00300	.00190	.30300	.01290	.04930	.08500	.08870
1.151	-2.490	-.33520	.19920	.00590	-.00260	.00200	.30690	.01320	.05010	.08260	.08410
1.151	-.160	-.18050	.13690	.00290	-.00120	.00100	.30140	.01340	.05110	.08110	.08590
1.151	2.120	-.03270	.06780	.00060	.00180	.00000	.29360	.01330	.05060	.07850	.08530
1.151	4.430	.12750	.00110	-.00240	-.00080	-.00110	.29110	.01330	.05070	.07890	.08060
1.151	6.760	.27680	-.05730	-.00560	.00120	-.00220	.28200	.01360	.05160	.08110	.07700
1.151	-.160	-.18220	.13860	.00290	-.00350	.00110	.30580	.01330	.05050	.07960	.09320
	GRADIENT	.06769	-.02827	-.00106	.00022	-.00034	-.00159	.00004	.00014	-.00070	-.00065

RUN NO. 35/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.252	-7.280	-.63010	.29220	.00270	-.00030	.00240	.30770	.01290	.04930	.07640	.08490
1.252	-4.880	-.43790	.21200	-.00090	.00080	.00200	.30090	.01260	.04790	.07640	.08270
1.252	-2.490	-.27030	.14430	-.00420	.00290	.00110	.30120	.01310	.04990	.07190	.07970
1.252	-.130	-.11640	.08620	-.00800	.00390	.00030	.30240	.01310	.04980	.07230	.07500
1.252	2.150	.02760	.02760	-.00910	.00380	-.00050	.29340	.01330	.05060	.07230	.07720
1.252	4.470	.16510	-.02900	-.01070	.00320	-.00120	.28910	.01370	.05230	.07400	.07580
1.252	6.800	.31000	-.08330	-.01360	.00410	-.00220	.28480	.01420	.05390	.07500	.07380
1.252	-.130	-.11770	.08700	-.00750	.00390	.00010	.30320	.01310	.04980	.07260	.07520
	GRADIENT	.06445	-.02566	-.00105	.00025	-.00034	-.00134	.00010	.00041	-.00027	-.00070

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (R1N022) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 40/ 1 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.460	-7.330	-.59760	.26060	-.01050	.00760	.00080	.31140	.00990	.03790	.05670	.06580
1.460	-4.930	-.41860	.18840	-.01010	.00660	.00070	.30860	.00990	.03770	.05330	.06390
1.460	-2.520	-.25370	.12500	-.01280	.00780	.00030	.30550	.01010	.03850	.05340	.06390
1.460	-.160	-.10140	.06790	-.01510	.00830	-.00060	.30340	.01020	.03900	.05380	.06290
1.460	2.180	.04560	.01430	-.01810	.00900	-.00100	.30160	.01030	.03920	.05390	.06050
1.460	4.450	.17670	-.03850	-.01870	.00900	-.00140	.30120	.01010	.03850	.05450	.05700
1.460	6.810	.31690	-.08980	-.02240	.01170	-.00200	.29910	.01030	.03910	.05520	.05530
1.460	-.170	-.10300	.06720	-.01360	.00810	.00000	.30430	.01010	.03840	.05290	.06210
	GRADIENT	.06353	-.02407	-.00096	.00026	-.00023	-.00080	.00003	.00010	.00012	-.00073

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (R1N023) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 27/ 0 RN/L = 6.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.795	-6.440	-.13970	.06390	.28360	-.12710	.04320	.12210	.01070	.04090	.06690	.07910
.795	-4.320	-.14970	.07220	.18910	-.08460	.02840	.12630	.01040	.03850	.06430	.07830
.795	-2.190	-.15890	.08030	.10210	-.04470	.01480	.13170	.00990	[illegible]	.06180	.07610
.795	-.100	-.16760	.08720	.01880	-.00920	.00430	.13610	.00940	.03990	.05850	.07150
.795	2.000	-.16730	.08640	-.06070	.02530	-.00630	.14520	.00910	.03470	.05350	.06830
.795	4.100	-.16990	.08550	-.14390	.06350	-.01940	.14030	.00990	.03770	.05280	.07450
.795	6.200	-.16370	.08080	-.23210	.10550	-.03300	.13860	.01020	.03890	.05200	.07780
.795	-.100	-.17200	.08870	.02020	-.00980	.00440	.13670	.00940	.03570	.05890	.07170
	GRADIENT	-.00232	.00156	-.03941	.01741	-.00555	.00197	-.00009	-.00032	-.00149	-.00073

MSFC IWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN023) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 26/ 0 RN/L = 6.36 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.904	-6.530	-.11920	.05580	.29050	-.12980	.04730	.15250	.01120	.04270	.07190	.08330
.904	-4.380	-.12300	.06170	.19870	-.09110	.03250	.15920	.01110	.04230	.06880	.08190
.904	-2.220	-.13550	.06780	.10890	-.05160	.01700	.15520	.01070	.04070	.06560	.08010
.904	-.090	-.14530	.07410	.01620	-.00900	.00300	.15920	.00990	.03760	.06210	.07530
.904	2.020	-.14170	.07120	-.07190	.03240	-.01050	.16320	.00990	.03790	.05890	.07580
.904	4.140	-.14330	.07290	-.15580	.07100	-.02350	.17030	.01010	.03850	.05520	.07790
.904	6.270	-.14360	.07480	-.24710	.11240	-.03850	.16920	.01100	.04190	.05640	.08270
.904	-.090	-.14820	.07650	.01770	-.00940	.00310	.16270	.01020	.03870	.06430	.07680
	GRADIENT	-.00221	.00122	-.04191	.01918	-.00657	.00142	-.00013	-.00049	-.00159	-.00058

RUN NO. 24/ 0 RN/L = 6.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.997	-6.530	-.11500	.06520	.29280	-.13470	.04930	.22010	.01090	.04140	.07680	.07970
.997	-4.390	-.12000	.07230	.19550	-.09090	.03300	.22530	.00970	.03700	.06990	.07400
.997	-2.230	-.13130	.08350	.10440	-.04930	.01760	.23330	.00930	.03540	.06670	.07160
.997	-.100	-.14590	.09500	.01030	-.00320	.00250	.24140	.00960	.03560	.06660	.07300
.997	2.020	-.14190	.08920	-.08210	.04170	-.01280	.23860	.00910	.03470	.06000	.07020
.997	4.150	-.14580	.09500	-.17090	.08460	-.02820	.25210	.01040	.03970	.05960	.07640
.997	6.300	-.14210	.08730	-.25970	.12370	-.04210	.24720	.01040	.03960	.05380	.07690
.997	-.100	-.14930	.09490	.01050	-.00330	.00220	.23730	.00950	.03640	.06560	.07280
	GRADIENT	-.00292	.00249	-.04310	.02072	-.00715	.00275	.00006	.00022	-.00128	.00016

RUN NO. 23/ 0 RN/L = 6.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.049	-6.560	-.11670	.07380	.29800	-.13570	.05210	.25460	.01230	.04700	.08400	.08240
1.049	-4.410	-.12930	.08670	.20050	-.09350	.03540	.26060	.01210	.04620	.08210	.07970
1.049	-2.240	-.13810	.09710	.10670	-.05040	.01860	.27160	.01150	.04380	.07740	.07420
1.049	-.100	-.15240	.10690	.01270	-.00410	.00250	.27400	.01130	.04310	.07350	.07470
1.049	2.020	-.15200	.10800	-.08110	.04140	-.01280	.27540	.01150	.04380	.06870	.07740
1.049	4.160	-.15150	.10530	-.17030	.08380	-.02840	.27810	.01170	.04450	.06420	.07810
1.049	6.330	-.14690	.09860	-.25960	.12120	-.04360	.27750	.01200	.04550	.06210	.07980
1.049	-.100	-.15150	.10680	.01320	-.00440	.00240	.27410	.01130	.04320	.07350	.07460
	GRADIENT	-.00273	.00225	-.04342	.02096	-.00743	.00182	-.00004	-.00016	-.00208	-.00000

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN023) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 22/ 0 RN/L = 6.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.105	-6.620	-.11210	.07280	.31070	-.13920	.05540	.27010	.01330	.05070	.08620	.08930
1.105	-4.450	-.12080	.08290	.21260	-.09830	.03820	.27400	.01300	.04960	.08560	.08600
1.105	-2.260	-.13010	.09260	.11760	-.05650	.02120	.28210	.01250	.04750	.08180	.08150
1.105	-.110	-.14180	.10130	.02340	-.01170	.00470	.28270	.01230	.04690	.07930	.08270
1.105	2.030	-.14480	.10410	-.07210	.03330	-.01140	.28270	.01270	.04830	.07480	.08630
1.105	4.180	-.13890	.09780	-.16050	.07400	-.02770	.28780	.01270	.04840	.07090	.08360
1.105	6.350	-.13410	.09120	-.25280	.11340	-.04430	.29590	.01300	.04970	.06800	.08700
1.105	-.100	-.13720	.09760	.02130	-.01090	.00470	.28230	.01200	.04580	.07810	.08030
	GRADIENT	-.00237	.00192	-.04343	.02016	-.00763	.00131	-.00002	-.00008	-.00169	-.00000

RUN NO. 25/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.249	-6.700	-.08570	.04550	.30310	-.12860	.05290	.28340	.01230	.04700	.07450	.07940
1.249	-4.490	-.08720	.05220	.19750	-.08350	.03550	.28490	.01210	.04600	.07260	.07540
1.249	-2.280	-.09190	.05800	.09950	-.04040	.01800	.28890	.01220	.04650	.06970	.06930
1.249	-.110	-.09760	.06390	.00880	-.00140	.00290	.29340	.01200	.04550	.06610	.06840
1.249	2.060	-.09880	.06550	-.08070	.0[illegible]	-.01250	.29660	.01200	.04580	.06320	.07170
1.249	4.230	-.10430	.06710	-.16860	.07460	-.02850	.29670	.01240	.04730	.06150	.07620
1.249	6.440	-.10960	.06660	-.26340	.11190	-.04460	.29570	.01260	.04810	.06150	.07790
1.249	-.110	-.09630	.06140	.00840	-.00120	.00320	.29340	.01150	.04370	.06430	.06650
	GRADIENT	-.00189	.00171	-.04189	.01808	-.00728	.00144	.00002	.00009	-.00132	.00018

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN024) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 975.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 28/ 0 RN/L = 6.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.802	-6.450	-.20410	.11740	.18410	-.12640	.04230	.13780	.01080	.04130	.06800	.08340
.802	-4.350	-.21620	.12700	.19000	-.08380	.02790	.14350	.01020	.03900	.06530	.08100
.802	-2.190	-.22480	.13510	.10150	-.04440	.01450	.14830	.00960	.03670	.06330	.07800
.802	-.100	-.23380	.14090	.02210	-.01110	.00440	.15270	.00900	.03430	.06030	.07220
.802	2.000	-.23140	.14060	-.05800	.02260	-.00580	.15[illegible]80	.00880	.03370	.05740	.07040
.802	4.110	-.22740	.13570	-.14210	.06100	-.01860	.15820	.00910	.03470	.05510	.07420
.802	6.210	-.22240	.13160	-.22850	.10160	-.03190	.15290	.00970	.03700	.05520	.08000
.802	-.100	-.23470	.14190	.02290	-.01110	.00450	.15300	.00900	.03430	.06040	.07250
	GRADIENT	-.00138	.00109	-.03902	.01689	-.00537	.00184	-.00014	-.00055	-.00125	-.00101

RUN NO. 29/ 0 RN/L = 6.35 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.898	-6.510	-.18590	.11300	.28560	-.12590	.04490	.15910	.01180	.04500	.07410	.08860
.898	-4.360	-.19820	.12060	.19720	-.08890	.03030	.16580	.01070	.04080	.06900	.08340
.898	-2.230	-.20320	.12420	.10990	-.05120	.01600	.16930	.00990	.03770	.06680	.07980
.898	-.090	-.21290	.13130	.02080	-.01180	.00330	.16910	.00960	.03650	.06680	.07800
.898	2.020	-.21270	.13040	-.06830	.02980	-.00990	.17690	.00950	.03610	.06260	.07590
.898	4.150	-.21680	.13140	-.15250	.06660	-.02300	.17970	.00990	.03760	.06030	.07810
.899	6.270	-.21780	.13210	-.24220	.10760	-.03630	.17790	.01040	.03960	.06000	.08130
.898	-.090	-.21740	.13350	.02060	-.01160	.00300	.17010	.00950	.03640	.06700	.07790
	GRADIENT	-.00220	.00131	-.04126	.01843	-.00623	.00166	-.00009	-.00038	-.00101	-.00068

RUN NO. 31/ 0 RN/L = 6.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.049	-6.600	-.16060	.11210	.29160	-.12790	.04990	.26980	.01290	.04920	.08460	.08600
1.049	-4.430	-.17770	.12870	.19510	-.08670	.03270	.27680	.01270	.04840	.08260	.08350
1.049	-2.250	-.19210	.14270	.10390	-.04660	.01730	.28650	.01220	.04650	.07880	.07930
1.049	-.100	-.20640	.15260	.01160	-.00340	.00210	.28740	.01200	.04590	.07490	.08080
1.049	2.010	-.20580	.15340	-.07940	.03940	-.01240	.29000	.01220	.04650	.07050	.08290
1.049	4.150	-.19970	.14780	-.16690	.07960	-.02750	.29560	.01230	.04670	.06690	.08230
1.049	6.340	-.19540	.14090	-.25770	.11780	-.04210	.29300	.01260	.04780	.06510	.08500
1.049	-.100	-.20700	.15340	.01160	-.00360	.00210	.28580	.01210	.04600	.07520	.08120
	GRADIENT	-.00275	.00229	-.04236	.01954	-.00701	.00192	-.00004	-.00016	-.00185	.00005

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (R1N024) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 32/ 0 RN/L = 6.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.103	-6.640	-.14160	.09990	.29650	-.12790	.05180	.28180	.01190	.04540	.07760	.08080
1.103	-4.450	-.15950	.11800	.20020	-.08780	.03480	.28870	.01210	.04610	.07760	.08100
1.103	-2.270	-.16920	.12800	.10840	-.04820	.01850	.29920	.01150	.04390	.07270	.07700
1.103	-.110	-.18270	.13790	.01780	-.00710	.00380	.30080	.01130	.04320	.07000	.07740
1.103	2.010	-.18660	.14130	-.07190	.03330	-.01080	.30460	.01140	.04340	.06480	.08050
1.103	4.160	-.18720	.14180	-.15930	.07340	-.02660	.30890	.01150	.04390	.06140	.07980
1.103	6.360	-.18170	.13360	-.25120	.11180	-.04230	.30670	.01200	.04560	.05950	.08260
1.103	-.110	-.18170	.13770	.01840	-.00720	.00340	.30120	.01140	.04330	.06990	.07740
	GRADIENT	-.00339	.00284	-.04183	.01879	-.00707	.00213	-.00005	-.00023	-.00187	.00005

RUN NO. 30/ 0 RN/L = 6.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.252	-6.690	-.11060	.07050	.30370	-.12710	.05300	.28760	.01390	.05280	.07800	.08780
1.252	-4.480	-.11400	.07780	.19770	-.08170	.03570	.28650	.01360	.05170	.07700	.08650
1.252	-2.290	-.11410	.08100	.10050	-.04000	.01840	.29620	.01340	.05090	.07440	.07600
1.252	-.110	-.12100	.08840	.01320	-.00360	.00320	.29620	.01330	.05060	.07160	.07560
1.252	2.050	-.12300	.09070	-.07590	.03470	-.01230	.29960	.01360	.05180	.06930	.07980
1.252	4.240	-.12820	.08940	-.16290	.06960	-.02830	.30090	.01360	.05200	.06680	.07970
1.252	6.440	-.13350	.08990	-.25760	.10730	-.04460	.30250	.01380	.05250	.06630	.08250
1.252	-.110	-.12160	.08700	.01230	-.00350	.00310	.29780	.01280	.04860	.07050	.07200
	GRADIENT	-.00171	.00151	-.04121	.01732	-.00729	.00148	.00001	.00007	-.00117	-.00045

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (R1N025: (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 1/ 1 RN/L = 5.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.800	-6.890	-.51730	.20650	.00140	.00070	.00190	.12350	.01010	.03870	.05950	.07560
.800	-4.700	-.38470	.14960	.00520	-.00210	.00220	.13300	.00940	.03580	.05640	.06930
.800	-2.480	-.25000	.09080	-.00290	.00120	.00160	.13470	.00920	.03520	.05630	.06730
.800	-.260	-.11900	.04790	-.00010	-.00090	.00180	.13260	.00900	.03440	.05610	.06700
.800	1.960	.01340	.00380	-.00580	.00190	.00170	.12870	.00[illegible]	.03430	.05580	.06700
.800	4.200	.14690	-.03770	-.01240	.00380	.00120	.12170	.00910	.03450	.05630	.06740
.800	6.430	.28400	-.08700	-.01340	.00270	.00150	.11460	.00880	.03360	.05850	.06550
.800	-.250	-.11500	.04560	-.00470	.00190	.00130	.13140	.00910	.03470	.05610	.06890
	GRADIENT	.05970	-.02112	-.00176	.00056	-.00009	-.00129	-.00004	-.00016	-.00003	-.00018

RUN NO. 2/ 0 RN/L = 6.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.902	-7.000	-.52950	.21130	-.01280	.01020	-.00210	.15690	.01120	.04250	.05890	.07910
.902	-4.710	-.36490	.14460	-.01540	.01090	-.00200	.15780	.01080	.04100	.05550	.07800
.902	-2.480	-.22140	.07680	-.01670	.01120	-.00230	.15710	.01010	.03830	.05550	.07810
.902	-.270	-.07950	.01530	-.01980	.01150	-.00310	.15380	.01000	.03830	.05540	.07800
.902	1.960	.05600	-.03960	-.02020	.01130	-.00340	.14860	.00950	.03620	.05530	.07260
.902	4.210	.18780	-.08660	-.02490	.01250	-.00450	.14870	.00950	.03620	.05760	.07170
.902	6.500	.31020	-.11290	-.02550	.01290	-.00430	.13880	.00960	.03560	.06310	.07510
.902	-.270	-.07970	.01560	-.01980	.01070	-.00290	.15750	.00980	.03730	.05480	.07630
	GRADIENT	.06206	-.02597	-.00101	.00015	-.00027	-.00120	-.00014	-.00052	.00018	-.00081

RUN NO. 4/ [illegible] RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.995	-7.030	-.55010	.24150	.00550	-.00030	.00020	.22010	.01150	.04400	.06200	.08290
.995	-4.740	-.39740	.18660	.00250	.00110	.00070	.23200	.01130	.04290	.06890	.08100
.995	-2.[illegible]	-.24800	.12660	-.00040	.00140	.00040	.23280	.01070	.04070	.06630	.07800
.995	-.210	-.11410	.06350	-.00010	.00000	.00050	.22920	.01050	.04000	.06340	.07920
.995	2.060	.04050	-.00070	-.00340	.00140	.00030	.22800	.01090	.04160	.06660	.08240
.995	4.290	.18470	-.07050	-.00750	.00310	-.00030	.22070	.01070	.04100	.06790	.08020
.995	6.590	.32710	-.12080	-.01070	.00300	-.00180	.21090	.01060	.04030	.06970	.08000
.995	-.210	-.10120	.05490	-.00040	.00000	.00070	.22500	.00980	.03740	.06020	.07530
	GRADIENT	.06439	-.02843	-.00102	.00018	-.00009	-.00121	-.00004	-.00013	-.00008	.00012

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN025) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 5/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.049	-7.070	-.56850	.25880	.00330	.00190	.00100	.26110	.01230	.04680	.07710	.08060
1.049	-4.760	-.40390	.19320	.00040	.00240	.00050	.26220	.01230	.04680	.07520	.07780
1.049	-2.430	-.25510	.13610	-.00090	.00310	.00040	.26230	.01240	.04710	.07370	.07680
1.049	-.170	-.11430	.07450	-.00110	.00070	.00010	.25550	.01230	.04690	.07310	.08100
1.049	2.100	.03210	.01350	-.00270	.00080	.00020	.24990	.01250	.04750	.07210	.08130
1.049	4.370	.18490	-.05800	-.00680	.00240	-.00030	.25030	.01280	.04880	.07270	.07930
1.049	6.690	.33330	-.11140	-.01020	.00300	-.00190	.24680	.01220	.04660	.07210	.07520
1.049	-.180	-.11280	.07260	-.00100	.00080	.00020	.26280	.01150	.04400	.06970	.07600
	GRADIENT	.06427	-.02742	-.00071	-.00010	-.00008	-.00159	.00005	.00019	-.00029	.00033

RUN NO. 6/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.110	-7.120	-.57480	.26190	.00360	.00300	.00120	.27900	.01170	.04450	.07350	.07650
1.110	-4.810	-.41540	.19890	.00220	.00220	.00090	.27460	.01160	.04420	.07280	.07630
1.110	-2.470	-.26380	.13870	-.00050	.00310	.00000	.27600	.01130	.04320	.06920	.07470
1.110	-.190	-.12230	.07900	-.00200	.00350	.00000	.27380	.01130	.04290	.06680	.07770
1.110	2.100	.02610	.01660	-.00510	.00360	-.00020	.27170	.01130	.04320	.06370	.07540
1.110	4.370	.17060	-.04680	-.00790	.00470	-.00090	.27330	.01140	.04350	.06410	.07070
1.110	6.700	.32440	-.10610	-.01420	.00780	-.00220	.26800	.01140	.04360	.06580	.06620
1.110	-.180	-.12010	.07890	-.00290	.00460	.00000	.27790	.01140	.04360	.06750	.07820
	GRADIENT	.06376	-.02675	-.00108	.00024	-.00017	-.00030	-.00002	-.00006	-.00100	-.00046

RUN NO. 7/ 0 RN/L = 6.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.160	-7.250	-.62020	.27750	.00460	-.00260	.00160	.27380	.01340	.05110	.08410	.08530
1.160	-4.890	-.44810	.21310	.00250	-.00300	.00080	.27580	.01320	.05020	.08120	.08100
1.160	-2.510	-.28550	.15100	.00150	-.00340	.00050	.28400	.01320	.05040	.07820	.07360
1.160	-.160	-.12910	.09110	.00050	-.00380	.00060	.28380	.01310	.04990	.07610	.07470
1.160	2.130	.01850	.02780	-.00270	-.00310	.00000	.27810	.01320	.05040	.07450	.07780
1.160	4.430	.16930	-.03770	-.00620	-.00090	-.00090	.27510	.01360	.05180	.07700	.07680
1.160	6.770	.31530	-.09160	-.00940	-.00120	-.00200	.27350	.01360	.05180	.07660	.06900
1.160	-.160	-.12490	.08710	.00040	-.00300	.00070	.28250	.01330	.05060	.07690	.07780
	GRADIENT	.06611	-.02683	-.00093	.00019	-.00017	-.00030	.00003	-.00014	-.00052	-.00019

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RINC25) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 37 0 RN/L = 6.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.249	-7.280	-.58520	.24700	-.00100	.00120	.00090	.27860	.01310	.05000	.07440	.08070
1.249	-4.900	-.39760	.17090	-.00500	.00210	.00070	.28020	.01280	.04880	.07190	.07820
1.249	-2.500	-.23090	.10710	-.00760	.00340	.00080	.28770	.01280	.04860	.06890	.07440
1.249	-.150	-.08240	.05270	-.00920	.00390	.00000	.28760	.01300	.04950	.06910	.07490
1.249	2.150	.05500	-.00100	-.01100	.00420	-.00080	.28350	.01300	.04940	.06890	.07540
1.249	4.460	.19390	-.05660	-.01230	.00300	-.00120	.28080	.01310	.04980	.07070	.07280
1.249	6.790	.33510	-.10930	-.01420	.00360	-.00200	.27800	.01330	.05060	.07220	.07020
1.249	-.140	-.08030	.05150	-.01100	.00510	-.00020	.28970	.01260	.04810	.05730	.07220
	GRADIENT	.06295	-.02410	-.00077	.00011	-.00023	-.00012	.00003	.00012	-.00011	-.00038

RUN NO. 42/ 0 RN/L = 6.61 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.463	-7.320	-.57190	.23530	-.01310	.00770	.00050	.29570	.01010	.03870	.05860	.06500
1.463	-4.930	-.39650	.16740	-.00780	.00470	.00090	.29360	.01000	.03890	.05600	.06410
1.463	-2.540	-.23390	.10490	-.01240	.00650	.00050	.29420	.00990	.03780	.05540	.06350
1.463	-.170	-.08280	.04930	-.01480	.00740	-.00010	.29280	.01000	.03810	.05510	.06270
1.463	2.170	.06230	-.00310	-.01820	.00870	-.00090	.29330	.01010	.03860	.05490	.05940
1.463	4.470	.19440	-.05420	-.02140	.00950	-.00160	.29150	.01010	.03860	.05580	.05840
1.463	6.810	.33280	-.10420	-.02550	.01250	-.00210	.29480	.01010	.03860	.05540	.05510
1.463	-.190	-.08760	.05090	-.01390	.00680	.00000	.29340	.00990	.03790	.05470	.06220
	GRADIENT	.06288	-.02345	-.00140	.00050	-.00028	-.00022	.00002	.00008	-.00004	-.00066

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (R1N025) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 14/ 0 RN/L = 5.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.804	-6.450	-.09650	.02690	.29200	-.13300	.04320	.11670	.01040	.03950	.06610	.07740
.804	-4.320	-.10240	.03120	.19280	-.08780	.02820	.12130	.00980	.03740	.06150	.07480
.804	-2.210	-.10730	.03810	.10500	-.04730	.01510	.12720	.00950	.03630	.05910	.07290
.804	-.100	-.11730	.04500	.02110	-.01000	.00420	.13120	.00920	.03500	.05590	.06960
.804	2.000	-.11210	.04170	-.06310	.02760	-.00700	.13620	.00940	.03580	.05220	.06780
.804	4.100	-.11380	.04120	-.14940	.06930	-.02050	.13540	.00980	.03730	.05010	.07160
.804	6.210	-.10700	.03510	-.24400	.11410	-.03580	.13310	.01040	.03970	.04980	.07520
.804	-.100	-.11650	.04450	.02170	-.01040	.00410	.13200	.00910	.03460	.05560	.06900
	GRADIENT	-.00131	.00112	-.04050	.01848	-.00568	.00177	-.00000	-.00003	-.00141	-.00055

RUN NO. 13/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.902	-6.500	-.07560	.01730	.29760	-.13720	.04580	.14440	.01130	.04310	.06940	.08300
.902	-4.350	-.07060	.01310	.20440	-.09710	.03230	.15060	.01080	.04100	.06370	.07890
.902	-2.220	-.07230	.01250	.11510	-.05600	.01860	.14970	.01070	.04070	.06220	.07890
.902	-.100	-.08080	.01730	.01730	-.00850	.00320	.15600	.00970	.03710	.05700	.07350
.902	2.010	-.07820	.01400	-.07910	.03920	-.01150	.15980	.01040	.03980	.05600	.07800
.902	4.140	-.08130	.01640	-.16540	.07860	-.02470	.16270	.01050	.04000	.05250	.07840
.902	6.260	-.08040	.01950	-.25800	.12210	-.03860	.16300	.01100	.04190	.05180	.07960
.902	-.100	-.08190	.01760	.01620	-.00760	.00290	.15140	.01020	.03880	.05890	.07610
	GRADIENT	-.00129	.00038	-.04403	.02106	-.00679	.00162	-.00004	-.00014	-.00135	-.00009

RUN NO. 11/ 0 RN/L = 6.42 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.985	-6.540	-.08130	.03890	.30490	-.14170	.05120	.20950	.01210	.04590	.08040	.08840
.985	-4.400	-.08480	.04620	.20290	-.09530	.03470	.21620	.01150	.04390	.07480	.08540
.985	-2.220	-.09540	.05620	.11000	-.05240	.01930	.22240	.01130	.04310	.07050	.08310
.985	-.110	-.10640	.06240	.01380	-.00430	.00290	.22430	.01130	.04310	.06760	.08310
.985	2.020	-.10700	.06580	-.08490	.04420	-.01330	.23560	.01190	.04530	.06870	.08560
.985	4.150	-.09740	.05670	-.17390	.08680	-.02840	.23070	.01120	.04270	.06110	.08460
.985	6.300	-.10050	.05770	-.26910	.13050	-.04400	.24030	.01190	.04550	.06090	.08650
.985	-.100	-.10700	.06210	.01000	-.00280	.00240	.22400	.01120	.04270	.06710	.08270
	GRADIENT	-.00173	.00144	-.04445	.02159	-.00744	.00198	-.00000	-.00001	-.00137	.00003

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (RIN026) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 10/ 1 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.044	-6.580	-.08390	.04740	.30780	-.14070	.05350	.24900	.01260	.04800	.08290	.08500
1.044	-4.400	-.09350	.05800	.20760	-.09720	.03520	.25510	.01260	.04800	.08050	.08250
1.044	-2.230	-.10080	.06680	.11240	-.05340	.01970	.26200	.01230	.04700	.07690	.07800
1.044	-.110	-.11270	.07440	.01580	-.00550	.00270	.25340	.01220	.04640	.07420	.07820
1.044	2.020	-.11090	.07390	-.08070	.04170	-.01340	.26390	.01220	.04640	.07010	.08090
1.044	4.160	-.11170	.07220	-.17330	.09600	-.02930	.26380	.01250	.04750	.06730	.08200
1.044	6.330	-.10750	.06610	-.26580	.12560	-.04530	.26320	.01260	.04780	.06460	.08370
1.044	-.100	-.11720	.07760	.01210	-.00370	.00220	.25800	.01260	.04780	.07580	.08080
	GRADIENT	-.00218	.00166	-.04468	.02153	-.00768	.00087	-.00001	-.00008	-.00155	.00009

RUN NO. 9/ 0 RN/L = 6.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.111	-6.620	-.08650	.04960	.30700	-.13620	.05450	.26720	.01280	.04890	.08260	.08610
1.111	-4.450	-.09460	.05900	.20920	-.09480	.03720	.27040	.01280	.04890	.08200	.08390
1.111	-2.260	-.10250	.06690	.11390	-.05310	.02050	.27550	.01250	.04780	.07950	.08010
1.111	-.110	-.10900	.07470	.02150	-.01040	.00470	.27490	.01250	.04770	.07790	.07920
1.111	2.030	-.10960	.07410	-.07310	.03530	-.01120	.27720	.01260	.04790	.07280	.08210
1.111	4.180	-.11080	.07390	-.16310	.07620	-.02760	.29090	.01250	.04800	.07000	.08320
1.111	6.360	-.10900	.06910	-.25560	.11560	-.04440	.28100	.01280	.04890	.06730	.08610
1.111	-.100	-.11190	.07550	.01800	-.00890	.00400	.27540	.01250	.04770	.07780	.07910
	GRADIENT	-.00184	.00172	-.04314	.01997	-.00749	.00105	-.00001	-.00007	-.00142	.00003

RUN NO. 8/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.158	-6.660	-.08920	.05080	.31440	-.13660	.05560	.27230	.01360	.05170	.08550	.08810
1.158	-4.470	-.09410	.05590	.21240	-.09620	.03840	.27890	.01300	.04960	.08290	.08120
1.158	-2.280	-.10120	.06650	.11900	-.05550	.02210	.28460	.01270	.04820	.07940	.07640
1.158	-.110	-.11220	.07680	.02540	-.01330	.00570	.28720	.01270	.04840	.07630	.07190
1.158	2.040	-.11140	.07510	-.07010	.03170	-.01070	.29030	.01260	.04790	.07280	.07460
1.158	4.210	-.11080	.07070	-.16320	.07350	-.02770	.29030	.01270	.04840	.07090	.08000
1.158	6.400	-.10850	.06660	-.26080	.11420	-.04520	.28640	.01290	.04930	.06810	.08370
1.158	-.100	-.11190	.07650	.02190	-.01200	.00520	.28790	.01270	.04830	.07590	.07170
	GRADIENT	-.00201	.00177	-.04337	.01968	-.00751	.00132	-.00003	-.00012	-.00141	-.00020

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (R1N026) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 978.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 12/ 0 RN/L = 8.66 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.253	-6.680	-.07690	.03770	.30260	-.12730	.05250	.27730	.01330	.05070	.07510	.08260
1.253	-4.500	-.07750	.04380	.19760	-.08260	.03520	.27700	.01320	.05020	.07350	.08060
1.253	-2.270	-.07780	.04790	.10170	-.04140	.01870	.28350	.01300	.04960	.07250	.07250
1.253	-.100	-.08280	.05300	.01000	-.00300	.00370	.28300	.01270	.04850	.07150	.07220
1.253	2.060	-.08320	.05390	-.07970	.03650	-.01180	.28720	.01280	.04860	.06870	.07420
1.253	4.240	-.08810	.05440	-.17070	.07480	-.02840	.28830	.01290	.04930	.06620	.07740
1.253	6.440	-.09220	.05350	-.26680	.11390	-.04460	.28930	.01310	.04980	.06470	.07920
1.253	-.100	-.08390	.05370	.00810	-.00200	.00320	.28350	.01280	.04880	.07120	.07250
	GRADIENT	-.00122	.00125	-.04209	.01801	-.00723	.00121	-.00004	-.00013	-.00084	-.00022

RUN NO. 43/ 0 RN/L = 8.82 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.459	-6.700	-.07730	.03730	.29980	-.12740	.05030	.28450	.01100	.04170	.06180	.07090
1.459	-4.490	-.07910	.04200	.19060	-.07940	.03270	.28760	.01070	.04090	.05930	.06820
1.459	-2.280	-.08270	.04700	.09580	-.03930	.01700	.28820	.01050	.04000	.05720	.06650
1.459	-.090	-.08500	.05060	.01020	-.00510	.00400	.29260	.01020	.03900	.05630	.06310
1.459	2.090	-.08530	.04960	-.08100	.03280	-.00990	.29430	.01050	.04010	.05360	.06340
1.459	4.270	-.08900	.05170	-.16760	.06850	-.02510	.29860	.01080	.04100	.05060	.06340
1.459	6.480	-.09350	.05160	-.26230	.10540	-.04070	.29950	.01080	.04110	.04810	.06500
1.459	-.100	-.08500	.05000	.01170	-.00530	.00390	.29160	.01010	.03860	.05550	.06290
	GRADIENT	-.00102	.00101	-.04081	.01681	-.00551	.00128	.00001	.00001	-.00096	-.00058

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS (R1N027) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 10.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 816/ 0 RN/L = 1.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
2.990	-11.190	.46380	-.15331	.22420	.41130	-.15890	.05930	.00500	.01900	.02140	.02380
2.990	-9.110	.45603	-.14674	.22220	.33160	-.12850	.04850	.00490	.01850	.02190	.02430
2.990	-6.910	.45315	-.14068	.22130	.24290	-.09200	.03730	.00460	.01760	.02230	.02440
2.990	-4.730	.44749	-.13451	.22100	.15700	-.05540	.02450	.00450	.01720	.02250	.02430
2.990	-2.560	.43852	-.12765	.21920	.08110	-.02550	.01180	.00450	.01710	.02250	.02360
2.990	-.390	.43242	-.12345	.21850	.01190	-.00300	.00070	.00450	.01710	.02200	.02390
2.990	1.780	.43142	-.12395	.22160	-.05980	.02160	-.01000	.00450	.01710	.02230	.02290
2.990	3.950	.44328	-.13211	.22300	-.13250	.04710	-.02030	.00440	.01690	.01950	.02350
2.990	6.130	.45625	-.14138	.22800	-.21440	.08090	-.03350	.00440	.01670	.01670	.02500
2.990	8.360	.46319	-.14811	.23000	-.29970	.11560	-.04610	.00450	.01750	.01620	.02480
2.990	10.400	.47043	-.15754	.23330	-.39400	.15020	-.05930	.00490	.01860	.01650	.02440
2.990	-.370	.43435	-.12428	.21870	.00850	.00030	.00030	.00450	.01730	.02130	.02400
	GRADIENT	-.00071	.00040	.00029	-.03318	.01176	-.00513	-.00001	-.00003	-.00029	-.00010

RUN NO. 817/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	-10.760	.33875	-.09068	.20390	.30750	-.10790	.04520	.00200	.00780	.00920	.01010
4.450	-8.760	.33799	-.09965	.19910	.24450	-.08540	.03550	.00210	.00800	.00950	.01030
4.450	-6.660	.33055	-.09327	.19410	.17770	-.05920	.02720	.00210	.00810	.00970	.01050
4.450	-4.560	.32989	-.08371	.18940	.11630	-.03710	.01710	.00210	.00800	.00970	.01050
4.450	-2.470	.33312	-.07944	.18660	.06400	-.01940	.00950	.00210	.00820	.00970	.01010
4.450	-.360	.32405	-.08197	.18520	.01040	-.00200	.00050	.00210	.00810	.00980	.01020
4.450	1.710	.32749	-.08401	.18650	-.04230	.01280	-.00710	.00210	.00810	.01000	.01020
4.450	3.800	.33629	-.08751	.18980	-.09750	.03130	-.01540	.00210	.00830	.00970	.01030
4.450	5.920	.33539	-.08741	.19390	-.15630	.05150	-.02440	.00210	.00830	.00900	.01050
4.450	8.040	.34509	-.09611	.20200	-.22000	.07490	-.03300	.00210	.00830	.00830	.01060
4.450	10.030	.34999	-.10341	.20740	-.28750	.10030	-.04250	.00220	.00850	.00830	.01090
4.450	-.330	.32416	-.08227	.18620	.00800	.00010	.00040	.00220	.00840	.00920	.01050
	GRADIENT	.00082	-.00058	.00003	-.02555	.00809	-.00391	-.00000	.00003	.00001	-.00001

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740'S (P.IN027) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 10.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 818/ 0 RN/L = 5.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.959	-10.670	.31851	-.07915	.20420	.29340	-.10320	.04490	.00150	.00580	.00680	.00710
4.959	-8.680	.31657	-.07941	.19890	.22850	-.07760	.03400	.00150	.00590	.00710	.00740
4.959	-6.600	.31151	-.07515	.19360	.16620	-.05420	.02470	.00160	.00610	.00740	.00770
4.959	-4.520	.30931	-.07375	.18920	.10860	-.03390	.01620	.00160	.00610	.00750	.00780
4.959	-2.450	.30294	-.06878	.18580	.06140	-.01930	.00940	.00160	.00630	.00760	.00760
4.959	-.350	.30584	-.07608	.18530	.00750	-.00060	.00000	.00160	.00630	.00770	.00770
4.959	1.700	.30541	-.07505	.18620	-.03990	.01140	-.00660	.00160	.00640	.00780	.00780
4.959	3.770	.30821	-.07535	.18920	-.09140	.02860	-.01540	.00160	.00640	.00760	.00790
4.959	5.890	.30834	-.07728	.19380	-.14290	.04460	-.02250	.00160	.00630	.00710	.00790
4.959	7.980	.32181	-.08725	.20120	-.21060	.07100	-.03200	.00160	.00640	.00670	.00790
4.959	9.950	.32604	-.09488	.20710	-.27560	.09630	-.04170	.00170	.00560	.00660	.00800
4.959	-.350	.30544	-.07458	.18620	.00900	-.00060	.00020	.00170	.00660	.00710	.00800
	GRADIENT	.00001	-.00046	.00002	-.02418	.00751	-.00382	-.00000	.00003	.00002	.00002

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74OTS (R1N029) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 20.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 814/ 0 RN/L = 4.35 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
2.990	-11.150	1.04488	-.35011	.20530	.37570	-.13500	.06210	.00430	.01630	.02080	.02300
2.990	-9.060	1.04071	-.34445	.20000	.29570	-.10440	.05110	.00420	.01590	.02110	.02270
2.990	-6.890	1.02784	-.33438	.19680	.21650	-.07170	.03810	.00410	.01580	.02160	.02250
2.990	-4.700	1.01791	-.32715	.19550	.13900	-.04070	.02410	.00410	.01590	.02170	.02270
2.990	-2.540	1.00947	-.32132	.19930	.06700	-.01590	.01090	.00410	.01570	.02120	.02250
2.990	-.380	1.00807	-.31882	.20140	.00540	.00090	-.00090	.00390	.01480	.02080	.02250
2.990	1.780	1.01117	-.31962	.20180	-.05450	.01480	-.01270	.00390	.01480	.02050	.02310
2.990	3.950	1.02427	-.32982	.19930	-.12300	.03720	-.02520	.00400	.01540	.02020	.02330
2.990	6.160	1.03554	-.33818	.19690	-.20280	.06680	-.03820	.00400	.01550	.02010	.02350
2.990	8.370	1.04947	-.35072	.20150	-.28330	.09610	-.05130	.00410	.01570	.01920	.02340
2.990	10.420	1.05734	-.35888	.20730	-.35660	.12210	-.06240	.00430	.01640	.01900	.02380
2.990	-.330	1.00920	-.31025	.20300	.00180	.00320	-.00130	.00390	.01500	.02060	.02260
	GRADIENT	.00067	-.00017	.00047	-.02986	.00863	-.00565	-.00002	-.00009	-.00017	.00008

RUN NO. 813/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	-10.740	.85381	-.28904	.19960	.22920	-.09590	.04700	.00180	.00700	.00980	.01090
4.450	-8.740	.84058	-.27801	.19300	.22350	-.07080	.03700	.00180	.00710	.00910	.01080
4.450	-6.640	.83981	-.27584	.18970	.16420	-.05070	.02790	.00180	.00700	.00930	.00950
4.450	-4.520	.83911	-.27445	.18670	.10510	-.02980	.01880	.00170	.00670	.00940	.00920
4.450	-2.450	.84001	-.27394	.18390	.05000	-.01130	.00980	.00180	.00700	.00940	.00910
4.450	-.360	.84035	-.27338	.18390	-.00010	.00250	-.00040	.00180	.00690	.00920	.00900
4.450	1.730	.84343	-.27531	.18520	-.05280	.01610	-.01320	.00170	.00650	.00910	.00940
4.450	3.820	.84644	-.27948	.18650	-.10370	.03230	-.02270	.00170	.00660	.00920	.00940
4.450	5.920	.84851	-.28424	.18950	-.17350	.06140	-.03360	.00180	.00700	.00930	.00900
4.450	8.040	.85985	-.29229	.19400	-.22520	.07490	-.04050	.00190	.00720	.00910	.00900
4.450	10.020	.87405	-.30298	.20140	-.28770	.09750	-.05100	.00190	.00750	.00890	.00990
4.450	-.360	.86221	-.28194	.18920	-.00240	.00540	-.00080	.00180	.00700	.00900	.00910
	GRADIENT	.00087	-.00050	.00005	-.02496	.00727	-.00508	-.00000	-.00003	-.00003	.00003

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74OTS (R1N029) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 20.000 ELV-1L = .000
ELV-0L = .000 ELV-1R = .000
ELV-0R = .000

RUN NO. 815/ 0 RN/L = 5.16 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.959	-10.660	.82660	-.27975	.20400	.27800	-.09200	.04740	.00120	.00490	.00630	.00780
4.959	-8.670	.81427	-.26912	.19660	.21650	-.07030	.03670	.00130	.00500	.00660	.00800
4.959	-6.590	.81457	-.26722	.19410	.16170	-.05140	.02810	.00130	.00500	.00680	.00650
4.959	-4.510	.81240	-.26425	.19020	.10530	-.03180	.02050	.00130	.00490	.00690	.00620
4.959	-2.430	.81260	-.26395	.18570	.04920	-.01250	.01060	.00130	.00490	.00710	.00680
4.959	-.360	.82057	-.26842	.18400	.00030	.00090	-.00030	.00130	.00500	.00710	.00670
4.959	1.710	.82283	-.27118	.18670	-.04940	.01580	-.01230	.00120	.00480	.00710	.00660
4.959	3.780	.82500	-.27385	.18970	-.09930	.03130	-.02170	.00130	.00490	.00710	.00670
4.959	5.890	.82300	-.27605	.19110	-.15820	.05210	-.02990	.00130	.00520	.00730	.00650
4.959	7.950	.82954	-.28388	.19610	-.21860	.07240	-.03970	.00140	.00540	.00720	.00640
4.959	9.960	.84227	-.29552	.20040	-.28040	.09450	-.04860	.00140	.00560	.00710	.00700
4.959	-.360	.82034	-.26798	.18460	.00060	.00240	-.00020	.00140	.00540	.00720	.00690
	GRADIENT	.00171	-.00128	-.00000	-.02451	.00746	-.00518	-.00000	-.00030	.00002	.00004

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS (R1N029) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 821/ 0 RN/L = 4.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
2.990	-11.280	-.08658	.05886	.24880	.47240	-.19310	.05610	.00460	.01770	.02380	.02610
2.990	-9.170	-.08342	.05859	.24460	.37710	-.15350	.04560	.00430	.01660	.02400	.02630
2.990	-6.960	-.08396	.05902	.24120	.27940	-.11250	.03370	.00420	.01610	.02390	.02630
2.990	-4.760	-.08582	.06059	.24050	.18760	-.07350	.02230	.00430	.01660	.02380	.02620
2.990	-2.590	-.08905	.06312	.23970	.10090	-.03840	.01150	.00440	.01670	.02330	.02590
2.990	-.390	-.09275	.06502	.24050	.02150	-.00760	.00250	.00440	.01700	.02280	.02620
2.990	1.770	-.08998	.06295	.24230	-.05140	.02520	-.00550	.00450	.01710	.02100	.02650
2.990	3.950	-.09088	.06255	.24550	-.14250	.05590	-.01620	.00450	.01710	.01990	.02660
2.990	6.180	-.08912	.05939	.25020	-.23270	.09270	-.02730	.00440	.01690	.01820	.02690
2.990	8.410	-.08828	.05855	.25490	-.33250	.13540	-.03990	.00450	.01710	.01760	.02650
2.990	10.500	-.09291	.05949	.25960	-.42970	.17510	-.05080	.00460	.01750	.01710	.02640
2.990	-.380	-.09038	.06315	.24170	.01460	-.00250	.00160	.00450	.01710	.02180	.02630
	GRADIENT	-.00055	.00018	.00059	-.03775	.01489	-.00436	.00002	.00005	-.00046	.00005

RUN NO. 820/ 0 RN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	-10.820	-.07148	.05846	.23100	.37740	-.14950	.04590	.00210	.00820	.01000	.01090
4.450	-8.820	-.07001	.05569	.22440	.29950	-.11650	.03590	.00210	.00800	.01020	.01120
4.450	-6.710	-.06878	.05466	.21860	.22380	-.08590	.02670	.00200	.00790	.01050	.01140
4.450	-4.600	-.07041	.05559	.21800	.15190	-.05720	.01760	.00200	.00770	.01060	.01150
4.450	-2.490	-.07281	.05539	.21150	.09560	-.03170	.00970	.00200	.00770	.01060	.01150
4.450	-.390	-.07785	.05762	.21240	.02050	-.00670	.00210	.00200	.00780	.01070	.01160
4.450	1.710	-.08008	.05776	.21270	-.04700	.01950	-.00550	.00210	.00790	.01060	.01170
4.450	3.810	-.07491	.05339	.21730	-.11220	.04340	-.01270	.00210	.00800	.01030	.01180
4.450	5.950	-.07671	.05279	.22010	-.18650	.07220	-.02220	.00210	.00830	.00970	.01180
4.450	8.080	-.07295	.04863	.22810	-.26050	.10190	-.03030	.00210	.00810	.00920	.01170
4.450	10.050	-.07998	.05176	.23510	-.33200	.12930	-.03940	.00210	.00820	.00890	.01170
4.450	-.390	.7805	.05743	.21350	.02200	-.00660	.00320	.00210	.00810	.00970	.01170
	GRADIENT	.0077	-.0009	-.00001	-.03144	.01201	-.00361	.00001	.00004	-.00003	.00004

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS (R1N029) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 819/ 0 RN/L = 5.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.959	-10.710	-.07393	.06179	.23280	.35460	-.14010	.04380	.00150	.00590	.00740	.00790
4.959	-8.730	-.07156	.05722	.22430	.28230	-.11000	.03480	.00150	.00600	.00760	.00820
4.959	-6.620	-.06916	.05562	.22050	.21120	-.08160	.02610	.00150	.00600	.00780	.00840
4.959	-4.530	-.07043	.05509	.21610	.14510	-.05460	.01710	.00150	.00590	.00800	.00850
4.959	-2.470	-.07183	.05529	.21180	.08160	-.03010	.00970	.00150	.00590	.00810	.00860
4.959	-.380	-.07596	.05632	.21120	.01680	-.00520	.00200	.00150	.00600	.00830	.00870
4.959	1.700	-.07369	.05425	.21200	-.05240	.02270	-.00510	.00160	.00610	.00830	.00880
4.959	3.790	-.07252	.05049	.21430	-.11570	.04580	-.01450	.00160	.00620	.00810	.00880
4.959	5.900	-.07606	.05362	.22010	-.18650	.07390	-.02260	.00160	.00630	.00790	.00890
4.959	8.010	-.07416	.05052	.22710	-.25420	.10100	-.03090	.00160	.00630	.00740	.00890
4.959	9.970	-.07769	.05195	.23500	-.32630	.13090	-.03980	.00160	.00640	.00710	.00890
4.959	-.380	-.07609	.05515	.20900	.01560	-.00320	.00230	.00160	.00640	.00760	.00890
	GRADIENT	-.00029	-.00049	-.00016	-.03150	.01219	-.00375	.00001	.00004	.00002	.00004

MSFC TWT 622 (!A125) LAUNCH VEHICLE, 740TS+PLUME (R1N030) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 800/ 1 RN/L = 5.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	-10.840	-.07392	.05779	.22380	.36860	-.14100	.04190	-.00320	-.01220	.00550	.00660
4.450	-8.820	-.06742	.05169	.21850	.28930	-.10690	.03180	-.00320	-.01220	.00540	.00650
4.450	-6.680	-.07129	.05121	.21500	.21520	-.07820	.02230	-.00210	-.00930	.00580	.00620
4.450	-4.590	-.06487	.04852	.21180	.14190	-.04960	.01380	-.00120	-.00470	.00640	.00600
4.450	-2.480	-.07299	.05146	.20620	.07180	-.02150	.00440	-.00080	-.00310	.00700	.00560
4.450	-.380	-.07226	.04892	.20720	.00920	.00120	-.00180	-.00110	-.00440	.00750	.00480
4.450	1.720	-.07144	.04508	.20940	-.05270	.02090	-.00570	-.00140	-.00540	.00700	.00510
4.450	3.820	-.06815	.04589	.21580	-.10740	.03300	-.00880	-.00190	-.00750	.00490	.00530
4.450	5.960	-.06870	.04470	.22170	-.18160	.06180	-.01830	-.00240	-.00920	.00380	.00500
4.450	8.010	-.07259	.04686	.23080	-.25720	.09170	-.02700	-.00340	-.01320	.00210	.00640
4.450	10.070	-.07803	.04984	.24060	-.32870	.12020	-.03530	-.00520	-.01990	.00100	.00720
4.450	-.360	-.06994	.04838	.21490	-.00390	.01520	-.00060	-.00150	-.00570	.00530	.00540
	GRADIENT	-.00024	-.00036	.00053	-.02954	.00987	-.00263	-.00010	-.00038	-.00014	-.00009

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+PLUME (R1N031) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 10.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 801/ 0 RN/L = 5.03 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	-10.760	.32880	-.08460	.19960	.30230	-.10260	.04460	.00000	.00000	.00120	.00510
4.450	-8.760	.33313	-.08853	.19430	.23810	-.07910	.03400	.00000	-.00010	.00270	.00460
4.450	-6.650	.32896	-.08477	.18930	.16890	-.05230	.02410	-.00020	-.00080	.00470	.00430
4.450	-4.550	.33329	-.08910	.18450	.11250	-.03340	.01580	-.00040	-.00150	.00550	.00230
4.450	-2.460	.32452	-.08414	.18000	.06000	-.01680	.00790	-.00050	-.00220	.00530	.00200
4.450	-.350	.32068	-.08301	.17930	.00280	.00450	-.00250	-.00060	-.00240	.00530	.00140
4.450	1.710	.32740	-.08815	.18460	-.04260	.01210	-.00750	-.00110	-.00430	.00350	.00090
4.450	3.810	.33360	-.09135	.19110	-.09540	.02770	-.01460	-.00110	-.00430	.00190	.00020
4.450	5.900	33198	-.09161	.19670	-.15270	.04760	-.02260	-.00080	-.00330	.00040	.00150
4.450	8.030	.33694	-.09588	.20150	-.21650	.07020	-.03190	-.00100	-.00380	.00190	.00350
4.450	10.010	.34483	-.10278	.20840	-.27790	.09190	-.03940	-.00130	-.00500	.00250	.00450
4.450	-.370	.32325	-.08517	.18020	.00290	.00470	-.00300	-.00060	-.00260	.00460	.00160
	GRADIENT	.00017	-.00040	.00085	-.02482	.00724	-.00365	-.00010	-.00037	-.00043	-.00025

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740TS+PLUME (R1N032) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 20.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 802/ 0 RN/L = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	-10.740	.84469	-.27751	.20660	.28110	-.08710	.04810	-.00040	-.00180	-.00250	.00410
4.450	-8.740	.83669	-.27070	.19780	.21550	-.05210	.03750	-.00030	-.00150	-.00140	.00220
4.450	-6.640	.82611	-.26284	.19090	.15980	-.04580	.02870	-.00070	-.00280	-.00170	.00170
4.450	-4.550	.82034	-.25858	.18790	.10430	-.02860	.02100	-.00090	-.00350	-.00170	.00110
4.450	-2.450	.82358	-.25971	.18280	.05140	-.01310	.01250	-.00080	-.00300	-.00110	.00060
4.450	-.360	.83328	-.26591	.18210	.00170	.00120	-.00050	-.00070	-.00270	.00010	.00010
4.450	1.730	.82879	-.26381	.18030	-.05740	.01870	-.01550	-.00050	-.00210	.00150	.00020
4.450	3.820	.83128	-.26681	.18230	-.10320	.03130	-.02480	-.00060	-.00240	.00290	.00020
4.450	5.910	.83239	-.26911	.18380	-.15740	.04650	-.03110	-.00040	-.00180	.00360	.00060
4.450	8.040	.84385	-.27927	.18990	-.21500	.06430	-.03870	-.00030	-.00140	.00440	.00170
4.450	10.020	.85770	-.29090	.19730	-.27900	.08600	-.04890	.00000	.00000	.00500	.00330
4.450	-.360	.83382	-.26714	.18120	-.00780	.01100	-.00260	-.00050	-.00220	.00140	.00070
	GRADIENT	.00130	-.00098	-.00056	-.02604	.00725	-.00572	.00004	.00015	.00056	-.00011

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740T (R1N033) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 808/ 0 RN/L = 5.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	-10.790	-.03187	.02676	.17880	.34860	-.12950	.05330	.00230	.00880	.00000	.01180
4.450	-8.800	-.03651	.03070	.17440	.27670	-.10130	.04220	.00230	.00890	.00000	.01200
4.450	-5.670	-.04121	.03420	.17010	.20730	-.07580	.03170	.00230	.00890	.00000	.01200
4.450	-4.580	-.04867	.03976	.16630	.13800	-.04940	.02040	.00230	.00880	.00000	.01210
4.450	-2.480	-.05424	.04273	.16200	.07680	-.02600	.01160	.00230	.00870	.00000	.01210
4.450	-.380	-.05201	.04079	.15900	.01260	-.00350	.00170	.00220	.00860	.00000	.01220
4.450	1.720	-.05231	.04059	.16140	-.05140	.01900	-.00720	.00220	.00860	.00000	.01230
4.450	3.820	-.05051	.03939	.16560	-.11270	.04120	-.01690	.00220	.00860	.00000	.01230
4.450	5.930	-.04541	.03519	.16880	-.18180	.06690	-.02830	.00220	.00860	.00000	.01230
4.450	8.050	-.04024	.03103	.17450	-.25060	.09440	-.03780	.00230	.00870	.00000	.01230
4.450	10.050	-.04001	.02840	.17990	-.32200	.12160	-.04880	.00230	.00890	.00000	.01230
4.450	-.380	-.04907	.03836	.16120	.00810	.00290	.00200	00230	.00880	.00000	.01240
	GRADIENT	-.00008	-.00014	-.00010	-.02998	.01077	-.00445	-.00001	-.00002	.00000	.00003

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740T (R1N034) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 10.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 809/ 0 RN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	-10.760	.23108	-.06447	.14220	.29880	-.09840	.04740	.00220	.00840	.00000	.01120
4.450	-8.760	.22519	-.06181	.13890	.23850	-.07800	.03790	.00220	.00860	.00000	.01120
4.450	-6.660	.21419	-.05601	.13840	.17820	-.05770	.02870	.00220	.00860	.00000	.01070
4.450	-4.560	.20366	-.04977	.13670	.11920	-.03470	.01810	.00220	.00870	.00000	.01040
4.450	-2.460	.19459	-.04540	.13720	.05940	-.01640	.00980	.00230	.00890	.00000	.01000
4.450	- 370	.19309	-.04431	.13890	.00800	-.00180	.00130	.00220	.00850	.00000	.01050
4.450	1.710	.19116	-.04407	.13850	-.04320	.01250	-.00730	.00230	.00870	.00000	.01050
4.450	3.810	.19503	-.04734	.13840	-.10070	.03240	-.01640	.00230	.00880	.00000	.01080
4.450	5.910	.20153	-.05254	.13940	-.15730	.04920	-.02470	.00230	.00880	.00000	.01080
4.450	8.030	.21559	-.06260	.14250	-.21500	.06760	-.03330	.00230	.00890	.00000	.01040
4.450	10.010	.22246	-.06787	.14640	-.27640	.08890	-.04230	.00230	.00900	.00000	.01040
4.450	-.370	.19039	-.04370	.13780	.00580	.00070	.00040	.00230	.00890	.00000	.01070
	GRADIENT	-.00099	.00030	.00022	-.02546	.00780	-.00412	.00001	.00000	.00000	.00006

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740T (RIN035) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 20.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 810/ 0 RN/L = 5.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	-10.770	.52585	-.17558	.12990	.28860	-.08550	.05080	.00180	.00720	.00000	.00720
4.450	-8.760	.51208	-.16671	.12600	.22800	-.06580	.04010	.00190	.00740	.00000	.00670
4.450	-6.660	.48829	-.15291	.12200	.16500	-.04430	.02920	.00200	.00770	.00000	.00640
4.450	-4.540	.47989	-.14781	.12060	.10980	-.02930	.01990	.00200	.00770	.00000	.00640
4.450	-2.460	.46555	-.14038	.11850	.05350	-.01070	.00830	.00200	.00780	.00000	.00670
4.450	-.350	.46629	-.14041	.12020	.00200	.00320	-.00060	.00210	.00800	.00000	.00650
4.450	1.720	.47132	-.14344	.11970	-.04360	.01040	-.00870	.00210	.00820	.00000	.00650
4.450	3.810	.48186	-.15187	.12100	-.09510	.02350	-.01750	.00220	.00840	.00000	.00650
4.450	5.940	.49629	-.16081	.12150	-.15560	.04310	-.02770	.00220	.00830	.00000	.00660
4.450	8.050	.51602	-.17314	.12350	-.22010	.06420	-.03890	.00210	.00820	.00000	.00670
4.450	10.030	.53789	-.18651	.12750	-.28160	.08570	-.04870	.00210	.00800	.00000	.00650
4.450	-.370	.46655	-.14007	.12080	-.00130	.00860	-.00040	.00210	.00810	.00000	.00650
	GRADIENT	.00046	-.00054	.00010	-.02428	.00597	-.00440	.00002	.00009	.00000	-.00000

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740T+PLUME (R1N036) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 807/ 0 RN/L = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	-10.830	-.03147	.02387	.16970	.35050	-.12580	.05000	-.00260	-.01020	.00000	.00860
4.450	-8.810	-.04176	.02937	.16710	.27390	-.09410	.03760	-.00220	-.00840	.00000	.00810
4.450	-6.700	-.03695	.02778	.16450	.20060	-.06570	.02680	-.00180	-.00690	.00000	.00750
4.450	-4.590	-.04274	.03138	.16110	.13380	-.04150	.01660	-.00150	-.00570	.00000	.00700
4.450	-2.490	-.04183	.03079	.15530	.07240	-.01880	.00770	-.00100	-.00390	.00000	.00550
4.450	-.360	-.04005	.02652	.15080	.00580	.00500	-.00280	-.00070	-.00290	.00000	.00480
4.450	1.720	-.04457	.03102	.15670	-.04790	.01510	-.00580	-.00120	-.00470	.00000	.00470
4.450	3.820	-.04115	.02977	.16410	-.09990	.02670	-.01080	-.00210	-.00810	.00000	.00540
4.450	5.920	-.03800	.02540	.16750	-.16740	.05300	-.02180	-.00250	-.00950	.00000	.00640
4.450	8.060	-.03239	.02146	.17470	-.24300	.08190	-.03340	-.00340	-.01320	.00000	.00700
4.450	10.060	-.03149	.02041	.18340	-.31470	.10900	-.04390	-.00470	-.01810	.00000	.00780
4.450	-.380	-.03836	.02682	.15580	-.00130	.01270	-.00250	-.00110	-.00440	.00000	.00530
	GRADIENT	.00002	-.00014	.00035	-.02795	.00810	-.00325	-.00007	-.00027	.00000	-.00024

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740T+PLUME (R1N037) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 10.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 806/ 0 RN/L = 5.03 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	-10.770	.22136	-.06247	.13840	.29790	-.09600	.04640	-.00020	-.00080	.00000	.00380
4.450	-8.760	.21112	-.05674	.13470	.23490	-.07470	.03630	-.00030	-.00130	.00000	.00300
4.450	-6.660	.20595	-.05438	.13380	.17830	-.05740	.02790	-.00070	-.00290	.00000	.00210
4.450	-4.560	.20008	-.05141	.13060	.11560	-.03480	.01690	-.00070	-.00270	.00000	.00160
4.450	-2.460	.19335	-.04767	.12930	.06040	-.01780	.00850	-.00050	-.00200	.00000	.00210
4.450	-.370	.19330	-.04750	.12880	.01140	-.00510	.00240	-.00010	-.00060	.00000	.00120
4.450	1.710	.19482	-.04894	.13000	-.03740	.00770	-.00470	-.00050	-.00220	.00000	.00150
4.450	3.610	.20234	-.05458	.13390	-.09370	.02580	-.01400	-.00110	-.00440	.00000	.00150
4.450	5.900	.20979	-.05825	.13710	-.14910	.04190	-.02290	-.00170	-.00640	.00000	.00220
4.450	8.030	.21892	-.06304	.13700	-.20950	.06160	-.03190	-.00040	-.00160	.00000	.00300
4.450	10.010	.23171	-.07225	.14390	-.26730	.07990	-.04040	-.00090	-.00370	.00000	.00380
4.450	-.350	.19160	-.04690	.13060	.00320	.00410	.00140	-.00010	-.00060	.00000	.00110
	GRADIENT	.00029	-.00035	.00035	-.02470	.00702	-.00359	-.00004	-.00017	.00000	-.00004

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740T+PLUME (R1N038) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 20.000 ELV-1L = .000
ELV-OL = .000 ELV-1R = .000
ELV-OR = .000

RUN NO. 805/ 0 RN/L = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CLM	CAF	CY	CYN	CSL	CNBO	CABO	CABS	CABE
4.450	-10.760	.51600	-.16790	.12440	.28570	-.08370	.05090	-.00010	-.00060	.00000	.00300
4.450	-8.760	.49713	-.15843	.12020	.22510	-.06480	.04120	.00000	-.00010	.00000	.00240
4.450	-6.650	.48173	-.15033	.11690	.15970	-.04150	.03090	.00000	-.00010	.00000	.00000
4.450	-4.550	.46800	-.14310	.11500	.10190	-.02370	.01960	-.00010	-.00030	.00000	-.00280
4.450	-2.460	.45896	-.13657	.11140	.05310	-.01000	.00950	-.00040	-.00170	.00000	-.00480
4.450	-.370	.46053	-.13783	.11150	.00530	.00090	-.00050	.00000	-.00010	.00000	-.00770
4.450	1.720	.46074	-.13743	.11100	-.04050	.00720	-.00640	.00010	.00050	.00000	-.00640
4.450	3.810	.47413	-.14723	.11430	-.08930	.01900	-.01620	-.00010	-.00040	.00000	-.00500
4.450	5.920	.48846	-.15637	.11750	-.14860	.03660	-.02740	-.00030	-.00110	.00000	-.00250
4.450	8.050	.50839	-.16850	.12230	-.21790	.06180	-.04060	-.00020	-.00090	.00000	-.00080
4.450	10.030	.52993	-.18093	.12640	-.27940	.08200	-.04890	.00000	-.00010	.00000	.00040
4.450	-.370	.46607	-.14067	.11270	-.00050	.00770	-.00100	.00000	.00010	.00000	-.00690
	GRADIENT	.00067	-.00043	-.00009	-.02278	.00491	-.00419	.00002	.00010	.00000	-.00029

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740"+PLUME (R1N039) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-1L = .000
ELV-OL = .000 ELV-1R = .000
ELV-OR = .000

RUN NO. 8047 0 RN/L = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	10.580	.18006	-.03817	.13090	-.00310	.00070	.00030	-.00020	-.00080	.00000	.00120
4.450	12.550	.23076	-.05917	.12790	-.00530	.00350	-.00030	-.00020	-.00110	.00000	.00020
4.450	14.620	.28196	-.07637	.12310	-.01070	.00670	-.00150	-.00040	-.00170	.00000	-.00060
4.450	16.700	.33935	-.09707	.12070	-.00590	.00330	-.00140	-.00040	-.00170	.00000	-.00330
4.450	18.770	.38942	-.11014	.11810	-.00380	.00240	-.00090	-.00030	-.00130	.00000	-.00570
4.450	20.850	.45170	-.13480	.11320	-.00420	.00120	-.00100	.00000	.00000	.00000	-.00770
4.450	22.910	.49568	-.15405	.10290	-.01290	.00690	-.00250	.00050	.00220	.00000	-.00780
4.450	25.000	.58218	-.19556	.10020	-.01320	.00550	-.00240	.00060	.00250	.00000	-.00850
4.450	27.110	.67292	-.23899	.09660	-.01480	.00620	-.00220	.00070	.00270	.00000	-.00980
4.450	29.230	.76329	-.28146	.09580	-.01250	.00450	-.00210	.00070	.00280	.00000	-.01180
4.450	31.210	.85438	-.32416	.09550	-.01160	.00340	-.00210	.00050	.00190	.00000	-.01470
4.450	20.870	.46381	-.13830	.11150	-.00470	.00140	-.00090	.00020	.00090	.00000	-.00770
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS (SINOMC) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = 0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 803/ 0 RN/L = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	10.740	.29981	-.06794	.18080	-.00580	.00450	-.00160	-.00070	-.00280	.00540	.00120
4.450	12.760	.39781	-.10674	.18050	-.00430	.00300	-.00260	-.00080	-.00310	.00410	.00020
4.450	14.880	.49421	-.14425	.18030	-.00540	.00270	-.00260	-.00090	-.00370	.00340	-.00110
4.450	17.010	.58754	-.17538	.18050	-.00440	.00080	-.00220	-.00100	-.00380	.00190	-.00060
4.450	19.130	.68795	-.21391	.17800	-.00300	-.00040	-.00260	-.00090	-.00360	.00010	.00060
4.450	21.310	.80878	-.25691	.17950	-.00740	.00200	-.00360	-.00060	-.00240	.00060	.00020
4.450	23.440	.91712	-.29124	.18110	-.01040	.00430	-.00460	-.00050	-.00190	.00060	.00140
4.450	25.600	1.04849	-.34490	.18160	-.01710	.00820	-.00530	-.00030	-.00120	-.00010	.00260
4.450	27.770	1.19150	-.40180	.18800	-.01540	.00550	-.00370	.00000	.00000	-.00050	.00080
4.450	29.970	1.33974	-.46393	.13570	-.01830	.00710	-.00520	.00030	.00110	-.00080	-.00140
4.450	32.030	1.46778	-.52536	.19890	-.01900	.00680	-.00570	.00050	.00220	-.00100	-.00390
4.450	21.340	.82899	-.26211	.18040	-.00590	.00130	-.00280	-.00060	-.00240	.00060	.00020
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740TS (R1N041) (29 JUL 75)

REFERENCE DATA

SREF = 2390.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1200.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 812/ 0 RN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	10.750	.31049	-.07101	.18650	-.00050	.00120	-.00090	.00200	.00770	.00940	.00960
4.450	12.760	.39899	-.10421	.18480	-.00270	.00260	-.00120	.00200	.00770	.00950	.00960
4.450	14.890	.49995	-.14238	.18630	-.00250	.00230	-.00130	.00200	.00750	.00980	.00960
4.450	17.010	.59598	-.17821	.18390	-.00390	.00190	-.00150	.00190	.00740	.00980	.00940
4.450	19.140	.69951	-.21164	.18250	-.00380	.00160	-.00230	.00180	.00700	.00960	.00940
4.450	21.290	.81625	-.26013	.18230	-.01060	.00560	-.00330	.00180	.00690	.00940	.00930
4.450	23.460	.95005	-.31419	.18420	-.01240	.00580	-.00350	.00180	.00690	.00910	.00880
4.450	25.620	1.08661	-.36994	.18600	-.01670	.00780	-.00430	.00100	.00700	.00870	.00850
4.450	27.820	1.23265	-.42978	.18940	-.01490	.00520	-.00430	.00180	.00690	.00820	.00770
4.450	30.020	1.38731	-.49475	.19420	-.02430	.01140	-.00640	.00170	.00670	.00800	.00700
4.450	32.080	1.54078	-.55901	.1995	-.02110	.00870	-.00540	.00180	.00680	.00760	.00620
4.450	21.330	.82638	-.25341	.18410	-.00960	.00510	-.00270	.00180	.00580	.00840	.00850
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740T (RIN042) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 97.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETPIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 8117 0 PN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CAF	CY	CYN	CBL	CNBO	CABO	CABS	CABE
4.450	10.590	.18442	-.03834	.13910	-.00260	.00180	-.00070	.00210	.00820	.00000	.01010
4.450	12.550	.23509	-.05761	.13440	-.00520	.00320	-.00090	.00210	.00830	.00000	.01010
4.450	14.620	.28796	-.07697	.12850	-.00530	.00350	-.00110	.00220	.00840	.00000	.00910
4.450	16.700	.34565	-.09747	.12640	-.00420	.00350	-.00110	.00220	.00840	.00000	.00800
4.450	18.770	.39845	-.11527	.12090	-.00200	.00210	-.00070	.00220	.00840	.00000	.00720
4.450	20.890	.46159	-.13831	.11900	-.00370	.00250	-.00110	.00210	.00830	.00000	.00650
4.450	22.930	.51722	-.15554	.11540	-.00150	.00100	-.00080	.00210	.00790	.00000	.00630
4.450	25.020	.59642	-.19464	.11190	-.01300	.00800	-.00360	.00200	.00790	.00000	.00670
4.450	27.140	.67972	-.23244	.10950	-.01360	.00660	-.00310	.00210	.00790	.00000	.00540
4.450	29.260	.76785	-.27197	.10800	-.01390	.00690	-.00320	.00210	.00810	.00000	.00380
4.450	31.240	.85542	-.31244	.10850	-.00800	.00170	-.00190	.00210	.00820	.00000	.00220
4.450	20.890	.46652	-.13994	.11920	-.00250	.00170	-.00170	.00210	.00820	.00000	.00590
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

MSFC TWT 522 (IA125) LAUNCH VEHICLE, 74 OTS (R1N101) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 129'.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-1L = .000
ELV-OL = .000 ELV-1R = .000
ELV-OR = .000

RUN NO. 68/ 0 RN/L = 5.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-1L	ELV-OL	BETA
.599	-11.740	.01300	.29560	-.92000	-.92000	-.01000
.599	-9.590	.01260	.29390	-.92000	-.92000	-.01000
.599	-7.360	.01260	.29340	-.92000	-.92000	.00000
.599	-5.160	.01210	.29150	-.92000	-.92000	.00000
.599	-2.940	.01170	.29120	-.92000	-.92000	.00000
.599	-.730	.01120	.28810	-.92000	-.92000	.01000
.599	1.480	.01080	.28260	-.92000	-.92000	.01000
.599	3.710	.01090	.27640	-.92000	-.92000	.02000
.599	5.960	.01070	.26530	-.92000	-.92000	.03000
.599	8.200	.01060	.25430	-.92000	-.92000	.03000
.599	10.270	.01030	.24040	-.92000	-.92000	.04000
599	-.740	.01130	.28850	-.92000	-.92000	.01000
	GRADIENT	-.00013	-.00225	.00000	.00000	.00271

RUN NO. 69/ 0 RN/L = 6.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-1L	ELV-OL	BETA
.902	-13.290	.01550	.34910	-.92000	-.92000	.00000
.902	-10.860	.01490	.34670	-.92000	-.92000	.00000
.902	-8.280	.01430	.33890	-.92000	-.92000	.02000
.902	-5.850	.01430	.33260	-.92000	-.92000	.03000
.902	-3.400	.01290	.32330	-.92000	-.92000	.02000
.902	-.950	.01290	.32170	-.92000	-.92000	.04000
.902	1.460	.01270	.31680	-.92000	-.92000	.05000
.902	3.860	.01260	.31300	-.92000	-.92000	.05000
.902	6.290	.01270	.31630	-.92000	-.92000	.07000
.902	8.760	.01260	.31680	-.92000	-.92000	.08000
.902	10.980	.01250	.30390	-.92000	-.92000	.09000
.902	-.930	.01290	.32360	-.92000	-.92000	.05000
	GRADIENT	-.00005	-.00148	-.00000	-.00000	.00414

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RINI01) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 717 0 RN/L = 6.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.044	-14.300	.01760	.48220	-.92000	-.92000	-.05000
1.044	-11.630	.01640	.47910	-.92000	-.92000	-.03000
1.044	-8.900	.01650	.47550	-.92000	-.92000	-.02000
1.044	-6.300	.01610	.47030	-.92000	-.92000	-.01000
1.044	-3.720	.01580	.46450	-.92000	-.92000	.00000
1.044	-1.180	.01570	.45950	-.92000	-.92000	.01000
1.044	1.300	.01580	.45330	-.92000	-.92000	.02000
1.044	3.760	.01630	.44730	-.92000	-.92000	.03000
1.044	6.320	.01630	.43990	-.92000	-.92000	.05000
1.044	8.840	.01630	.43240	-.92000	-.92000	.06000
1.044	11.130	.01610	.42410	-.92000	-.92000	.07000
1.044	-1.160	.01600	.46190	-.92000	-.92000	.01000
	GRADIENT	.00006	-.00232	-.00000	-.00000	.00401

RUN NO. 707 0 RN/L = 6.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.197	-15.050	.01780	.49320	-.92000	-.92000	.00000
1.197	-12.220	.01700	.49870	-.92000	-.92000	.00000
1.197	-9.310	.01590	.49970	-.92000	-.92000	.00000
1.197	-6.570	.01620	.49880	-.92000	-.92000	.01000
1.197	-3.690	.01600	.48660	-.92000	-.92000	.03000
1.197	-1.200	.01530	.48490	-.92000	-.92000	.03000
1.197	1.310	.01500	.47770	-.92000	-.92000	.05000
1.197	3.830	.01500	.47260	-.92000	-.92000	.06000
1.197	6.460	.01500	.46180	-.92000	-.92000	.06000
1.197	9.010	.01510	.45260	-.92000	-.92000	.07000
1.197	11.410	.01530	.44330	-.92000	-.92000	.10000
1.197	-1.190	.01490	.48330	-.92000	-.92000	.04000
	GRADIENT	-.00013	-.00191	.00000	.00000	.00426

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (RIN101) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 135/ 0 RN/L = 6.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.466	14.850	.01440	.47110	-.92000	-.92000	.00000
1.466	-12.050	.01400	.46550	-.92000	-.92000	.01000
1.466	-9.220	.01330	.45910	-.92000	-.92000	.01000
1.466	-6.440	.01260	.45100	-.92000	-.92000	.04000
1.466	-3.750	.01250	.44450	-.92000	-.92000	.03000
1.466	-1.090	.01190	.44370	-.92000	-.92000	.04000
1.466	1.490	.01190	.44310	-.92000	-.92000	.06000
1.466	4.030	.01180	.44310	-.92000	-.92000	.07000
1.466	6.580	.01170	.43990	-.92000	-.92000	.08000
1.466	9.160	.01170	.43360	-.92000	-.92000	.08000
1.466	11.670	.01190	.42770	-.92000	-.92000	.10000
1.466	-1.070	.01190	.44560	-.92000	-.92000	.04000
	GRADIENT	-.00008	-.00019	-.00000	-.00000	.00540

RUN NO. 160/ 0 RN/L = 5.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
2.740	-12.120	.00500	.35920	-.92000	-.92000	-.01000
2.740	-9.940	.00470	.34990	-.92000	-.92000	.00000
2.740	-7.590	.00500	.34280	-.92000	-.92000	.00000
2.740	-5.290	.00540	.33350	-.92000	-.92000	.00000
2.740	-2.980	.00550	.32650	-.92000	-.92000	.00000
2.740	-.690	.00550	.32300	-.92000	-.92000	.00000
2.740	1.570	.00560	.31890	-.92000	-.92000	.01000
2.740	3.830	.00560	.31400	-.92000	-.92000	.01000
2.740	6.140	.00570	.30960	-.92000	-.92000	.01000
2.740	8.460	.00590	.30540	-.92000	-.92000	.02000
2.740	10.620	.00580	.30130	-.92000	-.92000	.03000
2.740	-.610	.00560	.32330	-.92000	-.92000	.00000
	GRADIENT	.00002	-.00185	-.00000	-.00000	.00176

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 DTS (R1N102) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976 0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = 0040

PARAMETRIC DATA

ALPHA = -5.000 ELV-1L = .000
ELV-OL = .000 ELV-1R = .000
ELV-OR = .000

RUN NO. 131/ 0 RN/L = 4.91 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-1L	ELV-OL	ALPHA
.595	-10.940	.01250	.27980	-.92000	-.92000	-6.45000
.595	-8.880	.01210	.28630	-.92000	-.92000	-6.44000
.595	-5.710	.01150	.28630	-.92000	-.92000	-6.44000
.595	-4.570	.01140	.28910	-.92000	-.92000	-6.44000
.595	-2.450	.01110	.28690	-.92000	-.92000	-6.44000
.595	-.310	.01180	.28390	-.92000	-.92000	-6.43000
.595	1.810	.01230	.29220	-.92000	-.92000	-6.44000
.595	3.930	.01280	.29470	-.92000	-.92000	-6.45000
.595	6.070	.01320	.29630	-.92000	-.92000	-6.44000
.595	8.230	.01360	.29300	-.92000	-.92000	-6.45000
.595	10.250	.01430	.29220	-.92000	-.92000	-6.45000
.595	-.310	.01220	.28850	-.92000	-.92000	-5 46000
	GRADIENT	.00019	.00079	.00000	.00000	-.00094

RUN NO. 130/ 0 RN/L = 6.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-1L	ELV-OL	ALPHA
.903	-11.900	.01540	.32580	-.92000	-.92000	-8.09000
.903	-9.630	.01490	.33000	-.92000	-.92000	-8.05000
.903	-7.250	.01470	.32940	-.92000	-.92000	-8.00000
.903	-4.920	.01430	.32820	-.92000	-.92000	-7.93000
.903	-2.670	.01430	.33740	-.92000	-.92000	-8.03000
.903	-.360	.01460	.33870	-.92000	-.92000	-8.06000
.903	1.890	.01540	.33830	-.92000	-.92000	-8.02000
.903	4.200	.01660	.33450	-.92000	-.92000	-8.03000
.903	6.510	.01680	.33450	-.92000	-.92000	-8.05000
.903	8.860	.01760	.33740	-.92000	-.92000	-8.04000
.903	11.080	.01770	.33920	-.92000	-.92000	-8.10000
.903	-.330	.01480	.33800	-.92000	-.92000	-8.02000
	GRADIENT	.00025	.00059	-.00000	-.00000	-.00832

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N102) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000 ELV-1L = .000
ELV-OL = .000 ELV-1R = .000
ELV-OR = .000

RUN NO. 128/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-1L	ELV-OL	ALPHA
1.047	-12.380	.02090	.44880	-.92000	-.92000	-9.25000
1.047	-10.000	.01990	.46200	-.92000	-.92000	-9.15000
1.047	-7.540	.01920	.46870	-.92000	-.92000	-9.08000
1.047	-5.160	.01900	.47540	-.92000	-.92000	-9.01000
1.047	-2.800	.01860	.47810	-.92000	-.92000	-8.97000
1.047	-.420	.01860	.47810	-.92000	-.92000	-8.990
1.047	1.950	.01960	.47990	-.92000	-.92000	-8.950
1.047	4.330	.02090	.47810	-.92000	-.92000	-8.93000
1.047	6.730	.02050	.47630	-.92000	-.92000	-9.05000
1.047	9.150	.02120	.47170	-.92000	-.92000	-9.10000
1.047	11.450	.02150	.46540	-.92000	-.92000	-9.17000
1.047	-.340	.01900	.47870	-.92000	-.92000	-8.97000
	GRADIENT	.00033	.00008	.00000	.00000	.00673

RUN NO. 129/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-1L	ELV-OL	ALPHA
1.198	-12.790	.02130	.46180	-.92000	-.92000	-10.25000
1.198	-10.390	.02080	.46060	-.92000	-.92000	-10.17000
1.198	-7.850	.02080	.46340	-.92000	-.92000	-10.07000
1.198	-5.330	.02110	.47950	-.92000	-.92000	-9.98000
1.198	-2.890	.02010	.48400	-.92000	-.92000	-9.95000
1.198	-.440	.01930	.48510	-.92000	-.92000	-9.94000
1.198	2.000	.01960	.48700	-.92000	-.92000	-9.94000
1.198	4.450	.01970	.48650	-.92000	-.92000	-9.97000
1.198	6.970	.01950	.48640	-.92000	-.92000	-10.03000
1.198	9.540	.02070	.48510	-.92000	-.92000	-10.11000
1.198	11.920	.02110	.48340	-.92000	-.92000	-10.19000
1.198	-.360	.01910	.48750	-.92000	-.92000	-9.96000
	GRADIENT	-.00004	.00038	.00000	.00000	-.00245

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N102) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 133/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-IL	ELV-OL	ALPHA
1.461	-12.740	.01720	.45930	-.92000	-.92000	-9.98000
1.461	-10.340	.01610	.46070	-.92000	-.92000	-9.91000
1.461	-7.830	.01480	.46440	-.92000	-.92000	-9.88000
1.461	-5.340	.01430	.46430	-.92000	-.92000	-9.85000
1.461	-2.900	.01400	.46680	-.92000	-.92000	-9.83000
1.461	-.400	.01400	.46940	-.92000	-.92000	-9.81000
1.461	2.010	.01400	.46920	-.92000	-.92000	-9.80000
1.461	4.500	.01450	.46800	-.92000	-.92000	-9.84000
1.461	6.990	.01430	.46720	-.92000	-.92000	-9.88000
1.461	9.510	.01530	.46560	-.92000	-.92000	-9.93000
1.461	11.870	.01600	.46710	-.92000	-.92000	-9.98000
1.461	-.380	.01410	.46910	-.92000	-.92000	-9.81000
	GRADIENT	.00006	.00010	.00000	.00000	-.00082

MSFC TWT 622 (A125) LAUNCH VEHICLE, 74 QTS (R1N103) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 123/ 0 RN/L = 4.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-IL	ELV-OL	ALPHA
.598	-10.930	.01290	.28060	-.92000	-.92000	-.34000
.598	-8.870	.01160	.28270	-.92000	-.92000	-.35000
.598	-6.690	.01060	.28050	-.92000	-.92000	-.35000
.598	-4.55[illegible]	.01040	.2824[illegible]	-.92000	-.92000	-.35000
.598	-2.430	.01050	.28310	-.92000	-.92000	-.35000
.598	-.290	.01050	.28150	-.92000	-.92000	-.36000
.599	1.820	.01080	.28460	-.92000	-.92000	-.36000
.599	3.950	.01140	.28020	-.92000	-.92000	-.36000
.599	6.090	.01230	.28080	-.92000	-.92000	-.36000
.598	8.250	.01310	.28090	-.92000	-.92000	-.37000
.599	10.280	.01350	.28900	-.92000	-.92000	-.37000
.598	-.300	.01050	.28260	-.92000	-.92000	-.36000
	GRADIENT	.00011	.00080	-.00000	-.00000	-.00141

RUN NO. 1[illegible]/ 0 RN/L = 6.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-IL	ELV-OL	ALPHA
.906	-11.680	.01490	.33560	-.92000	-.92000	-.63000
.906	-9.460	.01380	.33880	-.92000	-.92000	-.61000
.906	-7.140	.01290	.33570	-.92000	-.92000	-.58000
.906	-4.850	.01250	.33270	-.92000	-.92000	-.57000
.906	-2.600	.01200	.32430	-.92000	-.92000	-.56000
.906	-.320	.01210	.31570	-.92000	-.92000	-.58000
.906	1.940	.01310	.32250	-.92000	-.92000	-.58000
.906	4.190	.01390	.32730	-.92000	-.92000	-.58000
.906	6.450	.01470	.33510	-.92000	-.92000	-.60000
.906	8.750	.01560	.34180	-.92000	-.92000	-.63000
.906	10.920	.01630	.34400	-.92000	-.92000	-.66000
.906	-.330	.01210	.31590	-.92000	-.92000	-.58000
	GRADIENT	.00017	-.00056	.00000	.00000	-.00177

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN103) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 .0 FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 120/ 0 RN/L = 6.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-IL	ELV-OL	ALPHA
1.054	-12.070	.01720	.46730	-.92000	-.92000	-.79000
1.054	-9.760	.01590	.47270	-.92000	-.92000	-.76000
1.054	-7.340	.01530	.47360	-.92000	-.92000	-.75000
1.054	-4.970	.01510	.47130	-.92000	-.92000	-.74000
1.054	-2.660	.01500	.47190	-.92000	-.92000	-.75000
1.054	-.310	.01500	.46510	-.92000	-.92000	-.76000
1.054	1.980	.01540	.47090	-.92000	-.92000	-.76000
1.054	4.290	.01630	.47440	-.92000	-.92000	-.76000
1.054	6.640	.01740	.47600	-.92000	-.92000	-.77000
1.054	9.050	.01740	.47710	-.92000	-.92000	-.79000
1.054	11.290	.01820	.47490	-.9200[illegible]	-.92000	-.83000
1.054	-.310	.01530	.46370	-.92000	-.92000	-.74000
	GRADIENT	.00012	.00022	-.00000	-.00000	-.00215

RUN NO. 121/ 0 RN/L = 6.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-IL	ELV-OL	ALPHA
1.199	-12.350	.01610	.48780	-.92000	-.92000	-1.02000
1.199	-9.940	.01610	.49060	-.92000	-.92000	-.97000
1.199	-7.460	.01560	.49020	-.92000	-.92000	-.93000
1.199	-5.040	.01520	.48850	-.92000	-.92000	-.90000
1.199	-2.690	.01520	.48500	-.92000	-.92000	-.90000
1.199	-.300	.01500	.48210	-.92000	-.92000	-.90000
1.199	2.010	.01590	.49060	-.92000	-.92000	-.90000
1.199	4.360	.01590	.49120	-.92000	-.92000	-.93000
1.199	6.780	.01680	.49490	-.92000	-.92000	-.95000
1.199	9.220	.01710	.49340	-.92000	-.92000	-.99000
1.199	11.570	.01730	.49280	-.92000	-.92000	-1.03000
1.199	-.300	.01520	.48370	-.92000	-.92000	-.91000
	GRADIENT	.00013	.00102	.00000	.00000	-.00383

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N103) (04 JUN 75)

REFERENCE DATA

SREF = 2590.0000 SQ. FT. XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-1L = .000
ELV-OL = .000 ELV-1R = .000
ELV-OR = .000

RUN NO. 134/ 0 RN/L = 6.42 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-1L	ELV-OL	ALPHA
1.458	-12.380	.01480	.45120	-.92000	-.92000	-1.01000
1.458	-10.030	.01410	.45320	-.92000	-.92000	-.97000
1.458	-7.560	.01360	.45320	-.92000	-.92000	-.93000
1.458	-5.100	.01270	.45100	-.92000	-.92000	-.90000
1.458	-2.710	.01300	.44730	-.92000	-.92000	-.87000
1.458	-.340	.01160	.44540	-.92000	-.92000	-.86000
1.458	2.010	.01260	.44850	-.92000	-.92000	-.84000
1.458	4.410	.01290	.45420	-.92000	-.92000	-.85000
1.458	6.820	.01280	.45460	-.92000	-.92000	-.91000
1.458	9.300	.01330	.45590	-.92000	-.92000	-.94000
1.458	11.670	.01380	.45760	-.92000	-.92000	-1.00000
1.458	-.320	.01170	.44410	-.92000	-.92000	-.85000
	GRADIENT	.00003	.00101	.00000	.00000	.00209

RUN NO. 161/ 0 RN/L = 5.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-1L	ELV-OL	ALPHA
2.740	-11.130	.00590	.33020	-.92000	-.92000	-.66000
2.740	-8.990	.00600	.32900	-.92000	-.92000	-.65000
2.740	-6.720	.00600	.32650	-.92000	-.92000	-.65000
2.740	-4.490	.00580	.32450	-.92000	-.92000	-.64000
2.740	-2.250	.00570	.32350	-.92000	-.92000	-.64000
2.740	-.020	.00580	.32290	-.92000	-.92000	-.64000
2.740	2.180	.00600	.32390	-.92000	-.92000	-.63000
2.740	4.400	.00590	.32640	-.92000	-.92000	-.64000
2.740	6.660	.00580	.33010	-.92000	-.92000	-.66000
2.740	8.940	.00600	.33190	-.92000	-.92000	-.67000
2.740	11.080	.00630	.33600	-.92000	-.92000	-.69000
2.740	.000	.00590	.32450	-.92000	-.92000	-.64000
	GRADIENT	.00002	.00019	-.00000	-.00000	.00045

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N104) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 124/ 0 RN/L = 4.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-IL	ELV-OL	ALPHA
.596	-10.890	.01400	.23320	-.92000	-.92000	5.72000
.596	-8.830	.01270	.22760	-.92000	-.92000	5.73000
.596	-6.650	.01170	.23040	-.92000	-.92000	5.74000
.596	-4.540	.01030	.23090	-.92000	-.92000	5.72000
.596	-2.400	.01000	.23370	-.92000	-.92000	5.72000
596	-.270	.00910	.23160	-.92000	-.92000	5.71000
.596	1.840	.00960	.23530	-.92000	-.92000	5.73000
.596	3.960	.01080	.23840	-.92000	-.92000	5.73000
.596	6.120	.01110	.23570	-.92000	-.92000	5.73000
596	8.250	.01310	.23670	-.92000	-.92000	5.74000
.596	10.270	.01360	.23230	-.92000	-.92000	5.72000
.596	- 270	.00970	.23240	-.92000	-.92000	5.73000
	GRADIENT	.00003	.00078	-.00000	-.00000	.00141

RUN NO. 125/ 0 RN/L = 6.25 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-IL	ELV-OL	ALPHA
.897	-11.710	.01570	.30560	-.92000	-.92000	6.38000
.897	-9.400	.01450	.30930	-.92000	-.92000	6.42000
.897	-7.100	.01310	.30690	-.92000	-.92000	6.43000
897	-4.800	.01270	.30400	-.92000	-.92000	6.43000
897	-2.560	.01220	.30110	-.92000	-.92000	6.43000
.897	-.280	.01190	.29280	-.92000	-.92000	6.42000
.897	1.970	.01200	.29590	-.92000	-.92000	6.43000
.897	4.220	.01250	.30070	-.92000	-.92000	6.42000
.897	6 510	.01340	.30680	-.92000	-.92000	6.44000
.897	8.830	.01430	.30670	-.92000	-.92000	6.41000
.897	11.040	.01530	.30870	-.92000	-.92000	6.40000
.897	- 270	.01190	.29280	-.92000	-.92000	6.41000
	GRADIENT	-.00003	-.00052	-.00000	-.00000	-.00089

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N104) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 ELV-1L = .000
ELV-OL = .000 ELV-1R = .000
ELV-OR = .000

RUN NO. 127/ 1 RN/L = 6.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-1L	ELV-OL	ALPHA
1.047	-12.020	.01850	.42420	-.92000	-.92000	6.69000
1.047	-9.710	.01790	.43050	-.92000	-.92000	6.70000
1.047	-7.300	.01750	.43240	-.92000	-.92000	6.71000
1.047	-4.950	.01730	.43240	-.92000	-.92000	6.70000
1.047	-2.620	.01720	.43000	-.92000	-.92000	6.70000
1.047	-.270	.01590	.42440	-.92000	-.92000	6.68000
1.047	2.010	.01620	.42800	-.92000	-.92000	6.69000
1.047	4.320	.01670	.43220	-.92000	-.92000	6.71000
1.047	6.650	.01800	.43280	-.92000	-.92000	6.71000
1.047	9.090	.01870	.43350	-.92000	-.92000	6.71000
1.047	11.320	.01860	.42960	-.92000	-.92000	6.74000
1.047	-.270	.01610	.42570	-.92000	-.92000	6.69000
	GRADIENT	-.00010	-.00011	.00000	.00000	.00042

RUN NO. 126/ 0 RN/L = 6.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-1L	ELV-OL	ALPHA
1.195	-12.280	.01950	.44280	-.92000	-.92000	6.88000
1.195	-9.910	.01810	.45030	-.92000	-.92000	6.89000
1.195	-7.430	.01760	.45520	-.92000	-.92000	6.89000
1.195	-5.010	.01730	.45500	-.92000	-.92000	6.86000
1.195	-2.640	.01650	.45000	-.92000	-.92000	6.87000
1.195	-.260	.01560	.44410	-.92000	-.92000	6.87000
1.195	2.060	.01590	.44820	-.92000	-.92000	6.88000
1.195	4.420	.01720	.45180	-.92000	-.92000	6.88000
1.195	6.830	.01810	.45610	-.92000	-.92000	6.92000
1.195	9.290	.01820	.45390	-.92000	-.92000	6.95000
1.195	11.650	.01850	.44500	-.92000	-.92000	6.98000
1.195	-.250	.01570	.44330	-.92000	-.92000	6.87000
	GRADIENT	.00010	.00040	.00000	.00000	.00170

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (RIN104) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 ELV-1L = .000
ELV-OL = .000 ELV-1R = .000
ELV-OR = .000

RUN NO. 132/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA	ELV-1L	ELV-OL	ALPHA
1.456	-12.390	.01620	.41250	-.92000	-.92000	7.02000
1.456	-9.990	.01530	.42060	-.92000	-.92000	7.03000
1.456	-7.500	.01440	.43050	-.92000	-.92000	7.01000
1.456	-5.070	.01360	.43290	-.92000	-.92000	6.99000
1.456	-2.690	.01290	.43250	-.92000	-.92000	6.99000
1.456	-.270	.01180	.42960	-.92000	-.92000	6.99000
1.455	2.080	.01180	.43090	-.92000	-.92000	7.01000
1.456	4.470	.01270	.43140	-.92000	-.92000	7.03000
1.456	6.900	.01360	.43350	-.92000	-.92000	7.06000
1.456	9.360	.01460	.42710	-.92000	-.92000	7.08000
1.456	11.730	.01530	.42290	-.92000	-.92000	7.08000
1.456	-.290	.01180	.43000	-.92000	-.92000	7.00000
	GRADIENT	-.00001	.00004	-.00000	-.00000	.00713

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N105) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 75/ 0 RN/L = 5.15 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.595	-11.710	.01260	.29410	-.92000	-3.67000	.00000
.595	-9.580	.01250	.29350	-.92000	-3.67000	.00000
.595	-7.320	.01240	.29170	-.92000	-3.67000	.00000
.595	-5.160	.01190	.29120	-.92000	-3.67000	.00000
.595	-2.940	.01150	.29000	-.92000	-3.67000	.00000
.595	-.700	.01150	.28710	-.92000	-3.67000	.01000
.595	1.460	.01090	.28200	-.92000	-3.67000	.01000
.595	3.690	.01090	.27500	-.92000	-3.67000	.02000
.595	5.940	.01040	.26270	-.92000	-3.67000	.02000
.595	8.180	.01030	.25290	-.92000	-3.67000	.03000
.595	10.230	.01000	.23860	-.92000	-3.67000	.04000
.595	-.710	.01130	.28760	-.92000	-3.67000	.01000
	GRADIENT	-.00011	-.00227	.00000	-.00000	.00273

RUN NO. 74/ 0 RN/L = 6.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.901	-13.310	.01550	.34620	-.92000	-3.67000	.00000
.901	-10.870	.01500	.34490	-.92000	-3.67000	.00000
.901	-8.360	.01450	.34050	-.92000	-3.67000	.01000
.901	-5.870	.01370	.33120	-.92000	-3.67000	.02000
.901	-3.410	.01310	.32330	-.92000	-3.67000	.03000
.901	-.980	.01330	.32390	-.92000	-3.67000	.04000
.901	1.410	.01280	.31820	-.92000	-3.67000	.05000
.901	3.810	.01230	.31060	-.92000	-3.67000	.07000
.901	6.260	.01270	.31220	-.92000	-3.67000	.08000
.901	8.720	.01230	.31110	-.92000	-3.67000	.09000
.901	10.950	.01230	.29920	-.92000	-3.67000	.11000
.901	-.970	.01280	.32330	-.92000	-3.67000	.05000
	GRADIENT	-.00012	-.00182	-.00000	.00000	.00540

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN105) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 72/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.052	-14.370	.01750	.48460	-.92000	-3.67000	-.05000
1.052	-11.660	.01710	.48380	-.92000	-3.67000	-.03000
1.052	-8.950	.01600	.47750	-.92000	-3.67000	-.02000
1.052	-6.350	.01560	.47060	-.92000	-3.67000	.00000
1.052	-3.760	.01520	.46570	-.92000	-3.67000	.00000
1.052	-1.210	.01510	.46220	-.92000	-3.67000	.01000
1.052	1.270	.01510	.45590	-.92000	-3.67000	.01000
1.052	3.740	.01580	.44960	-.92000	-3.67000	.02000
1.052	6.310	.01620	.44330	-.92000	-3.67000	.04000
1.052	8.840	.01600	.43430	-.92000	-3.67000	.06000
1.052	11.130	.01530	.42440	-.92000	-3.67000	.08000
1.052	-1.170	.01600	.46270	-.92000	-3.67000	.01000
	GRADIENT	.00007	-.00218	.00000	-.00000	.00240

RUN NO. 73/ 0 RN/L = 6.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.202	-15.070	.01780	.48350	-.92000	-3.67000	.00000
1.202	-12.230	.01630	.49330	-.92000	-3.67000	.00000
1.202	-9.360	.01600	.48960	-.92000	-3.67000	.01000
1.202	-6.600	.01570	.48610	-.92000	-3.67000	.02000
1.202	-3.900	.01560	.48420	-.92000	-3.67000	.03000
1.202	-1.250	.01500	.48280	-.92000	-3.67000	.03000
1.202	1.310	.01480	.47610	-.92000	-3.67000	.04000
1.202	3.830	.01480	.47060	-.92000	-3.67000	.06000
1.202	6.420	.01500	.46330	-.92000	-3.67000	.07000
1.202	8.980	.01510	.45320	-.92000	-3.67000	.08000
1.202	11.390	.01500	.44250	-.92000	-3.67000	.10000
1.202	-1.9[illegible]	.01540	.48470	-.92000	-3.67000	.04000
	GRADIENT	-.00010	-.00184	.00000	.00000	.00386

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN105) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 136/ 0 RN/L = 6.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.461	-14.880	.01430	.47240	-.92000	-3.67000	.00000
1.461	-12.090	.01380	.46480	-.92000	-3.67000	.01000
1.461	-9.240	.01320	.45880	-.92000	-3.67000	.01000
1.461	-6.470	.01270	.45150	-.92000	-3.67000	.04000
1.461	-3.790	.01230	.44530	-.92000	-3.67000	.03000
1.461	-1.110	.01190	.44420	-.92000	-3.67000	.04000
1.461	1.490	.01190	.44370	-.92000	-3.67000	.05000
1.461	4.020	.01180	.44230	-.92000	-3.67000	.07000
1.461	6.570	.01160	.43950	-.92000	-3.67000	.07000
1.461	9.150	.01160	.43250	-.92000	-3.67000	.08000
1.461	11.660	.01200	.42690	-.92000	-3.67000	.10000
1.461	-1.040	.01190	.44470	-.92000	-3.67000	.05000
	GRADIENT	-.00006	-.00035	-.00000	-.00000	.00538

RUN NO. 159/ 0 RN/L = 5.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
2.740	-12.150	.00510	.35860	-.92000	-3.67000	.00000
2.740	-9.950	.00480	.35090	-.92000	-3.67000	.00000
2.740	-7.600	.00500	.34250	-.92000	-3.67000	.00000
2.740	-5.270	.00540	.33400	-.92000	-3.67000	.00000
2.740	-2.980	.00550	.32720	-.92000	-3.67000	.00000
2.740	-.690	.00550	.32240	-.92000	-3.67000	.00000
2.740	1.560	.00560	.31900	-.92000	-3.67000	.00000
2.740	3.820	.00570	.31440	-.92000	-3.67000	.01000
2.740	6.120	.00570	.30880	-.92000	-3.67000	.01000
2.740	8.430	.00590	.30530	-.92000	-3.67000	.02000
2.740	10.620	.00580	.30140	-.92000	-3.67000	.03000
2.740	-.640	.00560	.32330	-.92000	-3.67000	.00000
	GRADIENT	.00003	-.00185	-.00000	-.00000	.00132

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N106) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-1L = .000
ELV-OL = 5.000 ELV-1R = .000
ELV-OR = .000

RUN NO. 76/ 0 RN/L = 5.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-1L	ELV-OL	BETA
.599	-11.690	.01280	.29650	-.92000	4.50000	.00000
.599	-9.550	.01260	.29520	-.92000	4.50000	.00000
.599	-7.300	.01230	.29210	-.92000	4.50000	.00000
.599	-5.140	.01190	.29180	-.92000	4.50000	.00000
.599	-2.920	.01180	.29000	-.92000	4.50000	.01000
.599	-.690	.01140	.28700	-.92000	4.50000	.02000
.599	1.490	.01100	.27960	-.92000	4.50000	.03000
.599	3.730	.01110	.27360	-.92000	4.50000	.03000
.599	5.980	.01080	.26330	-.92000	4.50000	.03000
.599	8.240	.01040	.25140	-.92000	4.50000	.04000
.599	10.290	.01050	.23950	-.92000	4.50000	.04000
.599	-.680	.01140	.28550	-.92000	4.50000	.01000
	GRADIENT	-.00011	-.00256	.00000	-.00000	.00316

RUN NO. 77/ 0 RN/L = 6.56 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-1L	ELV-OL	BETA
.904	-13.320	.01580	.35260	-.92000	4.50000	.01000
.904	-10.860	.01510	.34950	-.92000	4.50000	.00000
.904	-8.300	.01450	.34440	-.92000	4.50000	.02000
.904	-5.820	.01360	.33200	-.92000	4.50000	.02000
.904	-3.350	.01350	.32940	-.92000	4.50000	.04000
.904	-.920	.01250	.32330	-.92000	4.50000	.05000
.904	1.460	.01290	.31700	-.92000	4.50000	.05000
.904	3.850	.01270	.31240	-.92000	4.50000	.07000
.904	6.320	.01270	.31220	-.92000	4.50000	.08000
.904	8.770	.01240	.31[illegible]	-.92000	4.50000	.08000
.904	11.000	.01260	.30330	-.92000	4.50000	.09000
.904	-.920	.01310	.32340	-.92000	4.50000	.04000
	GRADIENT	-.00008	-.00225	-.00000	.00000	.00375

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N106) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = 5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 79/ 0 RN/L = 6.82 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.048	-14.200	.01700	.47390	-.92000	4.50000	-.05000
1.048	-11.560	.01630	.47710	-.92000	4.50000	-.03000
1.048	-8.850	.01560	.47230	-.92000	4.50000	-.02000
1.048	-6.260	.01530	.46700	-.92000	4.50000	.00000
1.048	-3.680	.01480	.46080	-.92000	4.50000	.00000
1.048	-1.110	.01510	.45670	-.92000	4.50000	.02000
1.048	1.320	.01550	.45160	-.92000	4.50000	.02000
1.048	3.790	.01600	.44520	-.92000	4.50000	.03000
1.048	6.360	.01550	.43740	.92000	4.50000	.04000
1.048	8.880	.01550	.42910	-.92000	4.50000	.06000
1.048	11.150	.01550	.42050	-.92000	4.50000	.08000
1.048	-1.110	.01550	.45710	-.92000	4.50000	.01000
	GRADIENT	.00016	-.00209	.00000	-.00000	.00364

RUN NO. 78/ 0 RN/L = 7.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.199	-15.000	.01840	.48900	-.92000	4.50000	.00000
1.199	-12.190	.01720	.49820	-.92000	4.50000	.00000
1.199	-9.300	.01630	.49360	-.92000	4.50000	.01000
1.199	-6.560	.01620	.49050	-.92000	4.50000	.01000
1.199	-3.870	.01590	.48970	-.92000	4.50000	.03000
1.199	-1.180	.01530	.48760	-.92000	4.50000	.04000
1.199	1.330	.01500	.47950	-.92000	4.50000	.05000
1.199	3.840	.01500	.47340	-.92000	4.50000	.06000
1.199	6.480	.01520	.46660	-.92000	4.50000	.07000
1.199	9.020	.01550	.45670	-.92000	4.50000	.08000
1.199	11.420	.01530	.44540	-.92000	4.50000	.10000
1.199	-1.150	.01530	.48730	-.92000	4.50000	.04000
	GRADIENT	-.00012	-.00221	.00000	.00000	.00390

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RINI06) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = 5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 137/ 0 RN/L = 6.42 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.464	-14.850	.01450	.46900	-.92000	4.50000	.00000
1.464	-12.070	.01390	.46530	-.92000	4.50000	.01000
1.464	-9.230	.01340	.46080	-.92000	4.50000	.02000
1.464	-6.450	.01280	.45320	-.92000	4.50000	.04000
1.464	-3.760	.01260	.44730	-.92000	4.50000	.04000
1.464	-1.100	.01210	.44660	-.92000	4.50000	.05000
1.464	1.500	.01210	.44650	-.92000	4.50000	.06000
1.464	4.030	.01190	.44570	-.92000	4.50000	.07000
1.464	6.580	.01170	.44220	-.92000	4.50000	.08000
1.464	9.160	.01170	.43550	-.92000	4.50000	.09000
1.464	11.660	.01190	.42930	-.92000	4.50000	.11000
1.464	-1.040	.01210	.44710	-.92000	4.50000	.05000
	GRADIENT	-.00008	-.00019	.00000	-.00000	.00385

RUN NO. 158/ 0 RN/L = 5.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
2.740	-12.140	.00540	.35990	-.92000	4.50000	.00000
2.740	-9.940	.00490	.35130	-.92000	4.50000	.00000
2.740	-7.590	.00510	.34360	-.92000	4.50000	.00000
2.740	-5.290	.00540	.33470	-.92000	4.50000	.00000
2.740	-2.980	.00550	.32720	-.92000	4.50000	.00000
2.740	-.680	.00550	.32370	-.92000	4.50000	.01000
2.740	1.570	.00560	.31910	-.92000	4.50000	.01000
2.740	3.840	.00560	.31490	-.92000	4.50000	.01000
2.740	6.120	.00570	.31030	-.92000	4.50000	.01000
2.740	8.440	.00590	.30660	-.92000	4.50000	.02000
2.740	10.620	.00580	.30290	-.92000	4.50000	.03000
2.740	-.630	.00560	.32370	-.92000	4.50000	.00000
	GRADIENT	.00002	-.00183	-.00000	.00000	.00133

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N107) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 83/ 0 RN/L = 5.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.595	-11.660	.01250	.29450	-.92000	10.80000	-.01000
.595	-9.530	.01220	.29340	-.92000	10.80000	-.01000
.595	-7.300	.01210	.29370	-.92000	10.80000	-.01000
.595	-5.110	.01170	.29160	-.92000	10.80000	.00000
.595	-2.910	.01140	.28990	-.92000	10.80000	.01000
.595	-.670	.01100	.28670	-.92000	10.80000	.01000
.595	1.520	.01080	.28140	-.92000	10.80000	.01000
.595	3.740	.01060	.27440	-.92000	10.80000	.02000
.595	5.990	.01050	.26350	-.92000	10.80000	.03000
.595	8.230	.01020	.25100	-.92000	10.80000	.03000
.595	10.290	.01020	.23590	-.92000	10.80000	.04000
.595	-.680	.01110	.28730	-.92000	10.80000	.01000
	GRADIENT	-.00012	-.00234	-.00000	.00000	.00135

RUN NO. 82/ 0 RN/L = 6.58 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.906	-13.310	.01540	.35420	-.92000	10.80000	.00000
.906	-10.840	.01500	.35200	-.92000	10.80000	.00000
.906	-8.320	.01450	.34710	-.92000	10.80000	.01000
.906	-5.810	.01340	.33310	-.92000	10.80000	.02000
.906	-3.370	.01310	.32690	-.92000	10.80000	.03000
.906	-.950	.01280	.32390	-.92000	10.80000	.05000
.906	1.460	.01260	.31950	-.92000	10.80000	.05000
.906	3.860	.01250	.31400	-.92000	10.80000	.07000
.906	6.280	.01270	.31620	-.92000	10.80000	.07000
.906	8.740	.01240	.31660	-.92000	10.80000	.09000
	GRADIENT	-.00008	-.00178	.00000	.00000	.00498

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N107) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 80/ 0 RN/L = 6.85 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.049	-14.270	.01660	.47880	-.92000	10.80000	-.05000
1.049	-11.530	.01650	.47980	-.92000	10.80000	-.03000
1.049	-8.860	.01560	.47480	-.92000	10.80000	-.01000
1.049	-6.240	.01540	.47040	-.92000	10.80000	.00000
1.049	-3.680	.01500	.46470	-.92000	10.80000	.00000
1.049	-1.130	.01460	.46010	-.92000	10.80000	.02000
1.049	1.330	.01490	.45290	-.92000	10.80000	.02000
1.049	3.800	.01550	.44590	-.92000	10.80000	.03000
1.049	6.340	.01620	.44080	-.92000	10.80000	.05000
1.049	8.910	.01480	.42910	-.92000	10.80000	.06000
1.049	11.170	.01500	.42070	-.92000	10.80000	.07000
1.049	-1.100	.01570	.46080	-.92000	10.80000	.02000
	GRADIENT	.00007	-.00255	-.00000	.00000	.00363

RUN NO. 81/ 0 RN/L = 6.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.200	-15.060	.01870	.49480	-.92000	10.80000	.00000
1.200	-12.220	.01720	.50360	-.92000	10.80000	.00000
1.200	-9.320	.01620	.49920	-.92000	10.80000	.00000
1.200	-6.570	.01620	.49650	-.92000	10.80000	.01000
1.200	-3.880	.01620	.49590	-.92000	10.80000	.03000
1.200	-1.210	.01540	.49330	-.92000	10.80000	.04000
1.200	1.320	.01520	.48580	-.92000	10.80000	.05000
1.200	3.840	.01530	.47990	-.92000	10.80000	.06000
1.200	6.450	.01540	.47260	-.92000	10.80000	.07000
1.200	9.020	.01530	.46020	-.92000	10.80000	.08000
1.200	11.420	.01560	.45000	-.92000	10.80000	.10000
1.200	-1.180	.01550	.49400	-.92000	10.80000	.04000
	GRADIENT	-.00011	-.00214	.00000	-.00000	.00389

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N107) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-1L = .000
ELV-OL = 10.000 ELV-1R = .000
ELV-OR = .000

RUN NO. 138/ 0 RN/L = 6.42 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-1L	ELV-OL	BETA
1.459	-14.820	.01490	.47090	-.92000	10.80000	.00000
1.459	-12.070	.01400	.46660	-.92000	10.80000	.01000
1.459	-9.210	.01330	.46140	-.92000	10.80000	.02000
1.459	-6.430	.01290	.45710	-.92000	10.80000	.05000
1.459	-3.750	.01260	.45150	-.92000	10.80000	.04000
1.459	-1.090	.01210	.45080	-.92000	10.80000	.05000
1.459	1.520	.01210	.44960	-.92000	10.80000	.06000
1.459	4.040	.01200	.44710	-.92000	10.80000	.07000
1.459	6.600	.01170	.44410	-.92000	10.80000	.08000
1.459	9.190	.01170	.43590	-.92000	10.80000	.08000
1.459	11.670	.01180	.43100	-.92000	10.80000	.11000
1.459	-1.010	.01220	.45020	-.92000	10.80000	.06000
	GRADIENT	-.00007	-.00055	.00000	-.00000	.00385

RUN NO. 157/ 0 RN/L = 5.11 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-1L	ELV-OL	BETA
2.740	-12.140	.00540	.36020	-.92000	10.80000	.00000
2.740	-9.940	.00490	.35270	-.92000	10.80000	.00000
2.740	-7.610	.00510	.34340	-.92000	10.80000	.00000
2.740	-5.260	.00540	.33570	-.92000	10.80000	.00000
2.740	-2.980	.00550	.32870	-.92000	10.80000	.00000
2.740	-.690	.00550	.32430	-.92000	10.80000	.01000
2.740	1.570	.00560	.32020	-.92000	10.80000	.01000
2.740	3.830	.00560	.31620	-.92000	10.80000	.01000
2.740	6.120	.00570	.31190	-.92000	10.80000	.01000
2.740	8.440	.00590	.30830	-.92000	10.80000	.02000
2.740	10.630	.00580	.30460	-.92000	10.80000	.03000
2.740	-.620	.00560	.32460	-.92000	10.80000	.01000
	GRADIENT	.00002	-.00183	-.00000	.00000	.00133

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N108) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 5.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 91/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.598	-11.660	.01270	.28880	4.50000	-.92000	.00000
.598	-9.520	.01180	.28620	4.50000	-.92000	.00000
.599	-7.290	.01190	.28600	4.50000	-.92000	.00000
.598	-5.110	.01180	.28520	4.50000	-.92000	.01000
.598	-2.900	.01140	.28360	4.50000	-.92000	.01000
.598	-.660	.01140	.28220	4.50000	-.92000	.02000
.598	1.520	.01110	.27710	4.50000	-.92000	.02000
.598	3.740	.01080	.26870	4.50000	-.92000	.03000
.598	5.970	.01080	.25930	4.50000	-.92000	.04000
.599	8.220	.01020	.24700	4.50000	-.92000	.04000
.598	10.290	.01030	.23550	4.50000	-.92000	.05000
.598	-.660	.01120	.28120	4.50000	-.92000	.02000
	GRADIENT	-.00009	-.00225	-.00000	-.00000	.00272

RUN NO. 90/ 0 RN/L = 6.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.898	-13.250	.01620	.34570	4.50000	-.92000	.00000
.898	-10.800	.01550	.34370	4.50000	-.92000	.01000
.898	-8.280	.01470	.33790	4.50000	-.92000	.02000
.898	-5.790	.01410	.33030	4.50000	-.92000	.03000
.898	-3.350	.01410	.32500	4.50000	-.92000	.03000
.898	-.940	.01320	.31860	4.50000	-.92000	.04000
.898	1.470	.01290	.31380	4.50000	-.92000	.05000
.898	3.860	.01280	.31030	4.50000	-.92000	.07000
.899	6.300	.01280	.30940	4.50000	-.92000	.08000
.898	8.750	.01250	.31080	4.50000	-.92000	.10000
.898	11.010	.01300	.30500	4.50000	-.92000	.10000
.898	-.900	.01310	.31840	4.50000	-.92000	.04000
	GRADIENT	-.00017	-.00203	-.00000	-.00000	.00541

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN108) (04 JUN 75)

REFERENCE DATA

SREF = 2590.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 5.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 88/ 0 RN/L = 6.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.049	-14.170	.01830	.47700	4.50000	-.92000	-.03000
1.049	-11.510	.01710	.47570	4.50000	-.92000	-.02000
1.049	-8.850	.01690	.47350	4.50000	-.92000	-.01000
1.049	-6.210	.01670	.46670	4.50000	-.92000	.00000
1.049	-3.660	.01630	.46100	4.50000	-.92000	.01000
1.049	-1.120	.01600	.45650	4.50000	-.92000	.02000
1.049	1.350	.01610	.45200	4.50000	-.92000	.02000
1.049	3.820	.01650	.44560	4.50000	-.92000	.04000
1.049	6.350	.01720	.44080	4.50000	-.92000	.05000
1.049	8.900	.01590	.42920	4.50000	-.92000	.07000
1.049	11.200	.01630	.42120	4.50000	-.92000	.09000
1.049	-1.080	.01670	.45790	4.50000	-.92000	.02000
	GRADIENT	.00003	-.00203	.00000	-.00000	.00361

RUN NO. 89/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.198	-15.000	.01820	.50320	4.50000	-.92000	.01000
1.198	-12.160	.01740	.49500	4.50000	-.92000	.01000
1.198	-9.290	.01710	.49050	4.50000	-.92000	.01000
1.198	-6.540	.01700	.48850	4.50000	-.92000	.02000
1.198	-3.850	.01690	.48720	4.50000	-.92000	.03000
1.198	-1.200	.01660	.48520	4.50000	-.92000	.04000
1.198	1.360	.01640	.47990	4.50000	-.92000	.05000
1.198	3.870	.01640	.47500	4.50000	-.92000	.06000
1.198	6.470	.01640	.46640	4.50000	-.92000	.07000
1.198	9.020	.01620	.45520	4.50000	-.92000	.08000
1.198	11.440	.01650	.44630	4.50000	-.92000	.11000
1.198	-1.140	.01640	.48530	4.50000	-.92000	.04000
	GRADIENT	-.00007	-.00163	.00000	-.00000	.00389

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N108) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 5.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 140/ 0 RN/L = 6.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.462	-14.830	.01470	.46960	4.50000	-.92000	.00000
1.462	-12.080	.01340	.46520	4.50000	-.92000	.01000
1.462	-9.210	.01290	.46090	4.50000	-.92000	.02000
1.462	-6.430	.01260	.45400	4.50000	-.92000	.04000
1.462	-3.740	.01250	.44840	4.50000	-.92000	.03000
1.462	-1.070	.01220	.44680	4.50000	-.92000	.05000
1.462	1.500	.01220	.44600	4.50000	-.92000	.06000
1.462	4.040	.01210	.44510	4.50000	-.92000	.07000
1.462	6.590	.01190	.44270	4.50000	-.92000	.07000
1.462	9.200	.01200	.43460	4.50000	-.92000	.08000
1.462	11.670	.01220	.42910	4.50000	-.92000	.10000
1.462	-1.050	.01220	.44770	4.50000	-.92000	.04000
	GRADIENT	-.00005	-.00041	.00000	.00000	.00503

RUN NO. 156/ 0 RN/L = 5.11 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
2.740	-12.140	.00540	.36110	4.50000	-.92000	.00000
2.740	-9.950	.00500	.35210	4.50000	-.92000	.00000
2.740	-7.610	.00520	.34420	4.50000	-.92000	.00000
2.740	-5.260	.00540	.33520	4.50000	-.92000	.00000
2.740	-2.980	.00550	.32870	4.50000	-.92000	.00000
2.740	-.670	.00560	.32460	4.50000	-.92000	.00000
2.740	1.570	.00570	.32000	4.50000	-.92000	.01000
2.740	3.840	.00580	.31530	4.50000	-.92000	.01000
2.740	6.140	.00590	.30950	4.50000	-.92000	.01000
2.740	8.460	.00600	.30700	4.50000	-.92000	.02000
2.740	10.620	.00590	.30180	4.50000	-.92000	.03000
2.740	-.610	.00570	.32460	4.50000	-.92000	.00000
	GRADIENT	.00004	-.00197	.00000	-.00000	.00176

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN109) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 5.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 84/ 0 RN/L = 5.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.594	-11.610	.01280	.29420	4.50000	10.80000	.00000
.594	-9.480	.01240	.29170	4.50000	10.80000	.00000
.594	-7.250	.01230	.29050	4.50000	10.80000	.00000
.594	-5.090	.01210	.29100	4.50000	10.80000	.01000
.594	-2.870	.01180	.28880	4.50000	10.80000	.01000
.594	-.630	.01130	.28320	4.50000	10.80000	.03000
.594	1.550	.01100	.27800	4.50000	10.80000	.03000
.594	3.770	.01110	.27120	4.50000	10.80000	.04000
.594	6.020	.01100	.26110	4.50000	10.80000	.04000
.594	8.270	.01060	.24860	4.50000	10.80000	.05000
.594	10.320	.01050	.23580	4.50000	10.80000	.05000
.594	-.630	.01130	.28440	4.50000	10.80000	.02000
	GRADIENT	-.00011	-.00262	.00000	.00000	.00408

RUN NO. 85/ 0 RN/L = 6.59 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.900	-13.220	.01610	.35260	4.50000	10.80000	.02000
.900	-10.770	.01540	.35010	4.50000	10.80000	.03000
.900	-8.270	.01470	.34390	4.50000	10.80000	.04000
.900	-5.780	.01430	.33540	4.50000	10.80000	.05000
.900	-3.320	.01350	.32660	4.50000	10.80000	.07000
.900	-.910	.01300	.32520	4.50000	10.80000	.07000
.900	1.490	.01300	.32130	4.50000	10.80000	.08000
.900	3.880	.01310	.31550	4.50000	10.80000	.09000
.900	6.330	.01290	.31470	4.50000	10.80000	.10000
.900	8.790	.01220	.31160	4.50000	10.80000	.10000
.900	11.030	.01290	.30790	4.50000	10.80000	.11000
.900	-.890	.01300	.32520	4.50000	10.80000	.08000
	GRADIENT	-.00005	-.00155	-.00000	.00000	.00291

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N109: . 04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 5.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 87/ 0 RN/L = 6.91 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.047	-14.180	.01710	.48170	4.50000	10.80000	-.04000
1.047	-11.540	.01630	.48210	4.50000	10.80000	-.02000
1.047	-8.810	.01670	.47910	4.50000	10.80000	-.01000
1.047	-6.200	.01640	.47170	4.50000	10.80000	.00000
1.047	-3.650	.01610	.46730	4.50000	10.80000	.01000
1.047	-1.060	.01600	.46320	4.50000	10.80000	.02000
1.047	1.360	.01610	.45720	4.50000	10.80000	.03000
1.047	3.830	.01660	.45090	4.50000	10.80000	.04000
1.047	6.400	.01600	.44230	4.50000	10.80000	.06000
1.047	8.920	.01640	.43280	4.50000	10.80000	[illegible]
1.047	11.210	.01660	.42610	4.50000	10.80000	.08000
1.047	-1.060	.01650	.46350	4.50000	10.80000	.03000
	GRADIENT	.00006	-.00222	.00000	.00000	.00402

RUN NO. 86/ 0 RN/L = 7.03 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.200	-14.970	.01770	.49190	4.50000	10.80000	.01000
1.200	-12.150	.01670	.50090	4.50000	10.80000	.01000
1.200	-9.180	.01630	.49790	4.50000	10.80000	.02000
1.200	-6.520	.01630	.49490	4.50000	10.80000	.02000
1.200	-3.830	.01650	.49280	4.50000	10.80000	.04000
1.200	-1.190	.01610	.49130	4.50000	10.80000	.04000
1.200	1.370	.01600	.48510	4.50000	10.80000	.06000
1.200	3.890	.01620	.47830	4.50000	10.80000	.07000
1.200	6.490	.01650	.46990	4.50000	10.80000	.08000
1.200	9.050	.01640	.45930	4.50000	10.80000	.09000
1.200	11.460	.01550	.45030	4.50000	10.80000	.11000
1.200	-1.130	.01620	.49210	4.50000	10.80000	.05000
	GRADIENT	-.00004	-.00193	-.00000	-.00000	.00427

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (RIN109) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 5.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 139/ 0 RN/L = 6.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.458	-14.800	.01470	.46830	4.50000	10.80000	.00000
1.458	-12.070	.01340	.46710	4.50000	10.80000	.01000
1.458	-9.200	.01300	.46440	4.50000	10.80000	.02000
1.458	-6.420	.01280	.45760	4.50000	10.80000	.05000
1.458	-3.740	.01270	.45290	4.50000	10.80000	.04000
1.458	-1.060	.01230	.45230	4.50000	10.80000	.05000
1.458	1.520	.01230	.45060	4.50000	10.80000	.07000
1.458	4.060	.01230	.44880	4.50000	10.80000	.07000
1.458	6.610	.01210	.44550	4.50000	10.80000	.08000
1.458	9.200	.01210	.43720	4.50000	10.80000	.09000
1.458	11.680	.01230	.43230	4.50000	10.80000	.11000
1.458	-1.030	.01240	.45250	4.50000	10.80000	.05000
	GRADIENT	-.00005	-.00054	.00000	-.00000	.00424

RUN NO. 155/ 0 RN/L = 5.13 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
2.740	-12.140	.00540	.36140	4.50000	10.80000	.00000
2.740	-9.940	.00500	.35440	4.50000	10.80000	.00000
2.740	-7.610	.00510	.34540	4.50000	10.80000	.00000
2.740	-5.260	.00540	.33650	4.50000	10.80000	.00000
2.740	-2.980	.00550	.32880	4.50000	10.80000	.00000
2.740	-.660	.00560	.32450	4.50000	10.80000	.01000
2.740	1.570	.00570	.32110	4.50000	10.80000	.01000
2.740	3.830	.00580	.31720	4.50000	10.80000	.01000
2.740	6.120	.00580	.31220	4.50000	10.80000	.01000
2.740	8.460	.00600	.30900	4.50000	10.80000	.02000
2.740	10.630	.00590	.30530	4.50000	10.80000	.03000
2.740	-.630	.00570	.32560	4.50000	10.80000	.00000
	GRADIENT	.00004	-.00169	.00000	.00000	.00133

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N110) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 99/ 0 RN/L = 4.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.598	-11.560	.01070	.28330	10.80000	-3.67000	.00000
.598	-9.410	.01080	.28460	10.80000	-3.67000	.00000
.598	-7.170	.01030	.28140	10.80000	-3.67000	.00000
.598	-5.010	.01040	.28270	10.80000	-3.67000	.01000
.598	-2.800	.00990	.28190	10.80000	-3.67000	.01000
.598	-.590	.00970	.27680	10.80000	-3.67000	.02000
.598	1.610	.00970	.27330	10.80000	-3.67000	.02000
.598	3.830	.00950	.25530	10.80000	-3.67000	.03000
.598	6.050	.00920	.25610	10.80000	-3.67000	.04000
.598	8.300	.00900	.24570	10.80000	-3.67000	.04000
.598	10.370	.00860	.23260	10.80000	-3.67000	.04000
.598	-.580	.00960	.27810	10.80000	-3.67000	.02000
	GRADIENT	-.00005	-.00241	.00000	-.00000	.00272

RUN NO. 98/ 0 RN/L = 6.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.900	-13.210	.01590	.34920	10.80000	-3.67000	.02000
.900	-10.730	.01500	.34590	10.80000	-3.67000	.02000
.900	-8.190	.01420	.34010	10.80000	-3.67000	.02000
.900	-5.670	.01380	.32860	10.80000	-3.67000	.04000
.900	-3.260	.01310	.32110	10.80000	-3.67000	.04000
.900	-.860	.01270	.32120	10.80000	-3.67000	.05000
.900	1.550	.01280	.31730	10.80000	-3.67000	.06000
.900	3.950	.01260	.31160	10.80000	-3.67000	.08000
.900	6.410	.01270	.31250	10.80000	-3.67000	.08000
.900	8.830	.01240	.30930	10.80000	-3.67000	.09000
.900	11.100	.01250	.30370	10.80000	-3.67000	.11000
.900	-.800	.01310	.32500	10.80000	-3.67000	.04000
	GRADIENT	-.00006	-.00135	.00000	-.00000	.00541

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N110) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 96/ 0 RN/L = 6.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.048	-14.110	.01760	.46890	10.80000	-3.67000	-.02000
1.048	-11.460	.01620	.47780	10.80000	-3.67000	-.01000
1.048	-8.750	.01630	.47500	10.80000	-3.67000	.00000
1.048	-6.140	.01610	.46990	10.80000	-3.67000	.00000
1.048	-3.600	.01550	.46410	10.80000	-3.67000	.01000
1.048	-1.060	.01550	.46030	10.80000	-3.67000	.02000
1.048	1.410	.01580	.45430	10.80000	-3.67000	.03000
1.048	3.890	.01620	.44890	10.80000	-3.67000	.04000
1.048	6.450	.01560	.44200	10.80000	-3.67000	.05000
1.048	8.970	.01600	.43300	10.80000	-3.67000	.07000
1.048	11.270	.01690	.42630	10.80000	-3.67000	.08000
1.048	-1.010	.01600	.46140	10.80000	-3.67000	.02000
	GRADIENT	.00010	-.00207	.00000	.00000	.00401

RUN NO. 97/ 0 RN/L = 6.55 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.197	-14.960	.01770	.48090	10.80000	-3.67000	.01000
1.197	-12.130	.01660	.49210	10.80000	-3.67000	.00000
1.197	-9.220	.01630	.49440	10.80000	-3.67000	.01000
1.197	-6.460	.01620	.49070	10.80000	-3.67000	.02000
1.197	-3.780	.01580	.48680	10.80000	-3.67000	.03000
1.197	-1.110	.01600	.48690	10.80000	-3.67000	.04000
1.197	1.420	.01610	.48110	10.80000	-3.67000	.05000
1.197	3.940	.01590	.47400	10.80000	-3.67000	.06000
1.197	6.540	.01610	.46790	10.80000	-3.67000	.07000
1.197	9.090	.01580	.45690	10.80000	-3.67000	.08000
1.197	11 530	.01620	.44760	10.80000	-3.67000	.10000
1.197	-1.080	.01620	.48770	10.80000	-3.67000	.04000
	GRADIENT	.00002	-.00171	.00000	-.00000	.00389

MSFC TWT 622 (!A125) LAUNCH VEHICLE, 74 OTS (RINI10) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 142/ 0 RN/L = 6.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.460	-14.860	.01420	.47450	10.80000	-3.67000	.00000
1.460	-12.090	.01310	.46830	10.80000	-3.67000	.02000
1.460	-9.230	.01280	.46370	10.80000	-3.67000	.02000
1.460	-6.430	.01260	.45510	10.80000	-3.67000	.05000
1.460	-3.740	.01270	.45030	10.80000	-3.67000	.04000
1.460	-1.090	.01250	.44930	10.80000	-3.67000	.05000
1.460	1.510	.01240	.44720	10.80000	-3.67000	.06000
1.460	4.040	.01230	.44560	10.80000	-3.67000	.07000
1.460	6.600	.01230	.44400	10.80000	-3.67000	.07000
1.460	9.180	.01220	.43620	10.80000	-3.67000	.08000
1.460	11.690	.01240	.43020	10.80000	-3.67000	.10000
1.460	-1.010	.01250	.44930	10.80000	-3.67000	.05000
	GRADIENT	-.00005	-.00052	-.00000	-.00000	.00395

RUN NO. 151/ 0 RN/L = 5.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
2.740	-12.140	.00530	.36110	10.80000	-3.67000	.00000
2.740	-9.950	.00500	.35360	10.80000	-3.67000	.00000
2.740	-7.620	.00520	.34520	10.80000	-3.67000	.00000
2.740	-5.290	.00550	.33620	10.80000	-3.67000	.00000
2.740	-2.980	.00560	.32220	10.80000	-3.67000	.00000
2.740	-.690	.00570	.32510	10.80000	-3.67000	.00000
2.740	1.570	.00580	.32070	10.80000	-3.67000	.00000
2.740	3.830	.00590	.31560	10.80000	-3.67000	.01000
2.740	6.120	.00600	.31010	10.80000	-3.67000	.01000
2.740	8.430	.00510	.30670	10.80000	-3.67000	.02000
2.740	10.630	.00600	.30150	10.80000	-3.67000	.02000
2.740	-.630	.00580	.32480	10.80000	-3.67000	.00000
	GRADIENT	.00004	-.00199	.00000	-.00000	.00132

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N111) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 92/ 0 RN/L = 5.03 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.602	-11.690	.01330	.28990	10.80000	-.92000	.00000
.602	-9.520	.01260	.28760	10.80000	-.92000	.01000
.602	-7.300	.01240	.28700	10.80000	-.92000	.01000
.602	-5.130	.01230	.28690	10.80000	-.92000	.01000
.602	-[illegible].890	.01210	.28370	10.80000	-.92000	.02000
.602	-.670	.01160	.28240	10.80000	-.92000	.03000
.602	1.530	.01120	.27550	10.80000	-.92000	.03000
.602	3.760	.01130	.27030	10.80000	-.92000	.04000
.602	6.000	.01070	.25680	10.80000	-.92000	.04000
.602	8.250	.01090	.24750	10.80000	-.92000	.05000
.602	10.310	.01050	.23330	10.80000	-.92000	.06000
.602	-.670	.01150	.28160	10.80000	-.92000	.02000
	GRADIENT	-.00013	-.00213	-.00000	-.00000	.00271

RUN NO. 93/ 0 RN/L = 6.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.902	-13.250	.01620	.34670	10.80000	-.92000	.01000
.902	-10.800	.01550	.34570	10.80000	-.92000	.02000
.902	-8.290	.01470	.34010	10.80000	-.92000	.03000
.902	-5.790	.01420	.33200	10.80000	-.92000	.04000
.902	-3.360	.01380	.32690	10.80000	-.92000	.04000
.902	-.950	.01360	.32610	10.80000	-.92000	.06000
.902	1.470	.01280	.31500	10.80000	-.92000	.06000
.902	3.860	.01300	.31490	10.80000	-.92000	.07000
.902	6.310	.01300	.31600	10.80000	-.92000	.08000
.902	8.750	.01280	.31340	10.80000	-.92000	.08000
.902	11.020	.01290	.30640	10.80000	-.92000	.10000
.902	-.900	.01330	.32160	10.80000	-.92000	.06000
	GRADIENT	-.00013	-.00196	.00000	-.00000	.00374

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 PTS (RIN!!!) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 95/ 1 RN/L = 6.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.047	-14.090	.01750	.46420	10.80000	-.92000	-.01000
1.047	-11.460	.01630	.47850	10.80000	-.92000	-.01000
1.047	-8.720	.01660	.47750	10.80000	-.92000	.00000
1.047	-6.110	.01620	.47160	10.80000	-.92000	.00000
1.047	-3.590	.01570	.46710	10.80000	-.92000	.01000
1.047	-1.050	.01570	.46220	10.80000	-.92000	.02000
1.047	1.420	.01600	.45700	10.80000	-.92000	.03000
1.047	3.900	.01650	.45060	10.80000	-.92000	.04000
1.047	6.470	.01510	.44470	10.80000	-.92000	.05000
1.047	6.980	.01620	.43520	10.80000	-.92000	.07000
1.047	11.270	.01710	.42880	10.80000	-.92000	.08000
1.047	-1.000	.01630	.46380	10.80000	-.92000	.02000
	GRADIENT	.00011	-.00219	-.00000	.00000	.00401

RUN NO. 94/ 0 RN/L = 6.41 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.196	-14.850	.01710	.46230	10.80000	-.92000	.01000
1.196	-12.020	.01670	.48930	10.80000	-.92000	.00000
1.196	-9.140	.01560	.48830	10.80000	-.92000	.01000
1.196	-6.400	.01560	.48610	10.80000	-.92000	.02000
1.196	-3.740	.01550	.48430	10.80000	-.92000	.03000
1.196	-1.060	.01600	.48630	10.80000	-.92000	.04000
1.196	1.460	.01610	.48040	10.80000	-.92000	.05000
1.196	3.980	.01590	.47250	10.80000	-.92000	.06000
1.196	6.570	.01600	.46670	10.80000	-.92000	.07000
1.196	9.120	.01570	.45500	10.80000	-.92000	.08000
1.196	11.550	.01620	.44650	10.80000	-.92000	.10000
1.196	-1.040	.01610	.48590	10.80000	-.92000	.04000
	GRADIENT	.00005	-.00159	-.00000	-.00000	.00389

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN111) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 141/ 0 RN/L = 6.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.465	-14.820	.01410	.47380	10.80000	-.92000	.00000
1.465	-12.070	.01320	.46790	10.80000	-.92000	.02000
1.465	-9.180	.01280	.46200	10.80000	-.92000	.02000
1.465	-6.420	.01270	.45650	10.80000	-.92000	.05000
1.465	-3.750	.01270	.45060	10.80000	-.92000	.03000
1.465	-1.090	.01250	.44980	10.80000	-.92000	.05000
1.465	1.520	.01240	.44800	10.80000	-.92000	.05000
1.465	4.050	.01230	.44700	10.80000	-.92000	.07000
1.465	6.590	.01240	.44400	10.80000	-.92000	.08000
1.465	9.180	.01230	.43660	10.80000	-.92000	.08000
1.465	11.660	.01240	.43120	10.80000	-.92000	.11000
1.465	-1.030	.01250	.45020	10.80000	-.92000	.05000
	GRADIENT	-.00005	-.00048	-.00000	-.00000	.00501

RUN NO. 153/ 0 RN/L = 5.13 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
2.740	-12.140	.00530	.36110	10.80000	-.92000	.00000
2.740	-9.940	.00500	.35410	10.80000	-.92000	.00000
2.740	-7.610	.00520	.34460	10.80000	-.92000	.00000
2.740	-5.290	.00550	.33590	10.80000	-.92000	.00000
2.740	-2.980	.00560	.33010	10.80000	-.92000	.00000
2.740	-.680	.00570	.32480	10.80000	-.92000	.00000
2.740	1.570	.00580	.32120	10.80000	-.92000	.01000
2.740	3.830	.00590	.31660	10.80000	-.92000	.01000
2.740	6.120	.00590	.31140	10.80000	-.92000	.01000
2.740	8.440	.00610	.30730	10.80000	-.92000	.02000
2.740	10.620	.00590	.30180	10.80000	-.92000	.03000
2.740	-.530	.00580	.32560	10.80000	-.92000	.01000
	GRADIENT	.00004	-.00194	-.00000	-.00000	.00176

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N112) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-1L = 10.000
ELV-OL = 10.000 ELV-1R = .000
ELV-OR = .000

RUN NO. 100/ 0 RN/L = 4.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-1L	ELV-OL	BETA
.600	-11.530	.01140	.28650	10.80000	10.80000	.00000
.600	-9.380	.01110	.28600	10.80000	10.80000	.01000
.600	-7.130	.01060	.28320	10.80000	10.80000	.01000
.600	-4.970	.01080	.28420	10.80000	10.80000	.01000
.500	-2.760	.01030	.28260	10.80000	10.80000	.01000
.600	-.540	.01010	.27730	10.80000	10.80000	.02000
.500	1.660	.01000	.27270	10.80000	10.80000	.02000
.600	3.880	.01000	.26630	10.80000	10.80000	.03000
.600	6.120	.00960	.25590	10.80000	10.80000	.04000
.600	8.370	.00950	.24250	10.80000	10.80000	.04000
.600	10.420	.00940	.23240	10.80000	10.80000	.05000
.600	-.500	.01010	.27970	10.80000	10.80000	.02000
	GRADIENT	-.00009	-.00207	-.00000	-.00000	.00225

RUN NO 101/ 0 RN/L = 6.26 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-1L	ELV-OL	BETA
.899	-13.160	.01620	.35480	10.80000	10.80000	.02000
.899	-10.700	.01530	.35090	10.80000	10.80000	.02000
.899	-8.120	.01450	.34040	10.80000	10.80000	.04000
.899	-5.640	.01400	.33220	10.80000	10.80000	.04000
.899	-3.220	.01360	.32670	10.80000	10.80000	.05000
.899	-.800	.01350	.32750	10.80000	10.80000	.05000
.899	1.600	.01330	.32210	10.80000	10.80000	.05000
.899	4.000	.01330	.31710	10.80000	10.80000	.07000
.899	6.440	.01320	.31540	10.80000	10.80000	.08000
.899	8.880	.01240	.31440	10.80000	10.80000	.09000
.899	11.130	.01320	.30460	10.80000	10.80000	.09000
.899	-.760	.01340	.32780	10.80000	10.80000	.05000
	GRADIENT	-.00005	-.00142	.00000	.00000	.00291

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RINI12) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 103/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.047	-14.030	.01770	.47850	10.80000	10.80000	-.01000
1.047	-11.390	.01690	.48170	10.80000	10.80000	-.01000
1.047	-8.700	.01620	.47900	10.80000	10.80000	.00000
1.047	-6.030	.01600	.47270	10.80000	10.80000	.00000
1.047	-3.560	.01550	.46630	10.80000	10.80000	.02000
1.047	-1.000	.01550	.46130	10.80000	10.80000	.03000
1.047	1.440	.01590	.45430	10.80000	10.80000	.04000
1.047	3.910	.01680	.45000	10.80000	10.80000	.05000
1.047	6.460	.01570	.44130	10.80000	10.80000	.06000
1.047	8.980	.01630	.43380	10.80000	10.80000	.07000
1.047	11.270	.01730	.42800	10.80000	10.80000	.09000
1.047	-.960	.01620	.46280	10.80000	10.80000	.03000
	GRADIENT	.00017	-.00225	.00000	.00000	.00402

RUN NO. 102/ 0 RN/L = 6.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.199	-14.860	.01710	.47710	10.80000	10.80000	.02000
1.199	-12.010	.01600	.49310	10.80000	10.80000	.01000
1.199	-9.120	.01570	.49070	10.80000	10.80000	.02000
1.199	-6.380	.01550	.48680	10.80000	10.80000	.03000
1.199	-3.700	.01530	.48600	10.80000	10.80000	.04000
1.199	-1.040	.01540	.48440	10.80000	10.80000	.05000
1.199	1.490	.01540	.47830	10.80000	10.80000	.05000
1.199	4.000	.01570	.47230	10.80000	10.80000	.08000
1.199	6.580	.01560	.46510	10.80000	10.80000	.08000
1.199	9.130	.01540	.45380	10.80000	10.80000	.09000
1.199	11.570	.01590	.44430	10.80000	10.80000	.11000
1.199	-1.010	.01570	.48580	10.80000	10.80000	.05000
	GRADIENT	.00005	-.00184	.00000	.00000	.00506

MSFC TWT 622 (!A125) LAUNCH VEHICLE, 74 OTS (RIN112) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 143/ 0 RN/L = 6.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.465	-14.800	.01420	.47460	10.80000	10.80000	.00000
1.465	-12.040	.01320	.47080	10.80000	10.80000	.02000
1.465	-9.170	.01280	.46630	10.80000	10.80000	.02000
1.465	-6.400	.01280	.46010	10.80000	10.80000	.05000
1.465	-3.730	.01280	.45440	10.80000	10.80000	.04000
1.465	-1.040	.01250	.45390	10.80000	10.80000	.05000
1.465	1.530	.01240	.45210	10.80000	10.80000	.07000
1.465	4.070	.01240	.45[illegible]	10.80000	10.80000	.08000
1.465	6.640	.01230	.44840	10.80000	10.80000	.08000
1.465	9.220	.01230	.43980	10.80000	10.80000	.09000
1.465	11.680	.01250	.43490	10.80000	10.80000	.11000
1.465	-1.020	.01250	.45410	10.80000	10.80000	.05000
	GRADIENT	-.00005	-.00045	.00000	.00000	.00539

RUN NO. 154/ 0 RN/L = 5.13 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
2.740	-12.140	.00530	.36240	10.80000	10.80000	.00000
2.740	-9.940	.00500	.35550	10.80000	10.80000	.00000
2.740	-7.590	.00520	.34570	10.80000	10.80000	.00000
2.740	-5.260	.00550	.33590	10.80000	10.80000	.00000
2.740	-2.980	.00550	.32970	10.80000	10.80000	.00000
2.740	-.660	.00570	.32560	10.80000	10.80000	.00000
2.740	1.570	.00580	.32200	10.80000	10.80000	.01000
2.740	3.840	.00590	.31750	10.80000	10.80000	.01000
2.740	6.150	.00590	.31350	10.80000	10.80000	.01000
2.740	8.470	.00610	.30950	10.80000	10.80000	.02000
2.740	10.630	.00590	.30540	10.80000	10.80000	.03000
2.740	-.620	.00580	.32670	10.80000	10.80000	.01000
	GRADIENT	.00004	-.00176	.00000	.00000	.00176

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN113) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 115/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.605	-11.610	.01220	.28950	14.50000	-3.67000	.00000
.605	-9.440	.01180	.28760	14.50000	-3.67000	.01000
.605	-7.190	.01180	.28590	14.50000	-3.67000	.00000
.605	-5.020	.01130	.28440	14.50000	-3.67000	.01000
.605	-2.790	.01100	.28370	14.50000	-3.67000	.02000
.605	-.570	.01100	.28130	14.50000	-3.67000	.02000
.605	1.630	.01040	.27420	14.50000	-3.67000	.03000
.605	3.860	.01040	.26850	14.50000	-3.67000	03000
.605	6.080	.01020	.25830	14.50000	-3.67000	.04000
.605	8.330	.00980	.24780	14.50000	-3.67000	.05000
.605	10.410	.01010	.23590	14.50000	-3.67000	.05000
.605	-.590	.01090	.28010	14.50000	-3.67000	.02000
	GRADIENT	-.00011	-.00238	-.00000	.00000	.00180

RUN NO. 114/ 0 RN/L = 6.25 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.903	-13.230	.01610	.35020	14.50000	-3.67000	.02000
.903	-10.730	.01510	.34430	14.50000	-3.67000	.04000
.903	-8.190	.01460	.33930	14.50000	-3.67000	.04000
.903	-5.720	.01420	.33200	14.50000	-3.67000	.05000
.903	-3.260	.01350	.32420	14.50000	-3.67000	.05000
.903	-.840	.01300	.32180	14.50000	-3.67000	.06000
.903	1.550	.01280	.31800	14.50000	-3.67000	.07000
.903	3.940	.01250	.31340	14.50000	-3.67000	.08000
.903	6.380	.01280	.31310	14.50000	-3.67000	.09000
.903	8.830	.01230	.31270	14.50000	-3.67000	.10000
.903	11.090	.01270	.30400	14.50000	-3.67000	.11000
.903	-.830	.01310	.32420	14.50000	-3.67000	.06000
	GRADIENT	-.00013	-.00151	.00000	-.00000	.00417

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN113) (04 JUN 75)

REFERENCE DATA

SREF = 2893.0000 SQ. FT XMRP = 978.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 112/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.048	-14.190	.01910	.48850	14.50000	-3.67000	-.02000
1.048	-11.500	.01780	.48680	14.50000	-3.67000	-.01000
1.048	-8.790	.01710	.48300	14.50000	-3.67000	.00000
1.048	-6.160	.01680	.47890	14.50000	-3.67000	.00000
1.048	-3.620	.01700	.47330	14.50000	-3.67000	.02000
1.048	-1.050	.01670	.46800	14.50000	-3.67000	.02000
1.048	1.400	.01670	.46360	14.50000	-3.67000	.03000
1.048	3.890	.01730	.45750	14.50000	-3.67000	.04000
1.048	6.420	.01760	.45150	14.50000	-3.67000	.06000
1.048	8.970	.01690	.44170	14.50000	-3.67000	.07000
1.048	11.280	.01790	.43490	14.50000	-3.67000	.09000
1.048	-1.020	.01740	.46850	14.50000	-3.67000	.03000
	GRADIENT	.00004	-.00207	.00000	.00000	.00279

RUN NO. 113/ 0 RN/L = 6.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.205	-14.950	.01740	.48500	14.50000	-3.67000	.01000
1.205	-12.090	.01660	.49770	14.50000	-3.67000	.00000
1.205	-9.190	.01650	.49490	14.50000	-3.67000	.01000
1.205	-5.430	.01620	.49210	14.50000	-3.67000	.02000
1.205	-3.760	.01610	.48980	14.50000	-3.67000	.03000
1.205	-1.110	.01630	.48830	14.50000	-3.67000	.04000
1.205	1.430	.01620	.48330	14.50000	-3.67000	.06000
1.205	3.940	.01620	.47780	14.50000	-3.67000	.07000
1.205	6.530	.01650	.47590	14.50000	-3.67000	.08000
1.205	9.090	.01640	.46160	14.50000	-3.67000	.09000
1.205	11.540	.01670	.45300	14.50000	-3.67000	.11000
1.205	-1.070	.01640	.48950	14.50000	-3.67000	.04000
	GRADIENT	.00001	-.00159	-.00000	.00000	.00546

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 DTS (RIN113) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = -5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 145/ 0 RN/L = 6.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.464	-14.820	.01390	.47660	14.50000	-3.67000	.01000
1.464	-12.060	.01300	.46970	14.50000	-3.67000	.02000
1.464	-9.180	.01280	.46320	14.50000	-3.67000	.02000
1.464	-6.420	.01260	.45700	14.50000	-3.67000	.05000
1.464	-3.750	.01280	.45120	14.50000	-3.67000	.04000
1.464	-1.050	.01260	.45000	14.50000	-3.67000	.05000
1.464	1.510	.01250	.44920	14.50000	-3.67000	.06000
1.464	4.050	.01250	.44750	14.50000	-3.67000	.07000
1.464	6.650	.01250	.44560	14.50000	-3.67000	.08000
1.464	9.200	.01240	.43730	14.50000	-3.67000	.09000
1.464	11.700	.01250	.43220	14.50000	-3.67000	.11000
1.464	-1.0[illegible]	.01260	.45030	14.50000	-3.67000	.05000
	GRADIENT	-.00004	-.00046	.00000	-.00000	.00385

RUN NO 150/ 0 RN/L = 5.13 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
2.740	-12.140	.00490	.36390	14.50000	-3.67000	.00000
2.740	-9.950	.00500	.35480	14.50000	-3.67000	.00000
2.740	-7.610	.00520	.34620	14.50000	-3.67000	.00000
2.740	-5.290	.00550	.33730	14.50000	-3.67000	.00000
2.740	-2.980	.00560	.33000	14.50000	-3.67000	.00000
2.740	-.660	.00580	.32560	14.50000	-3.67000	.01000
2.740	1.570	.00590	.32140	14.50000	-3.67000	.01000
2.740	3.840	.00590	.31710	14.50000	-3.67000	.01000
2.740	6.120	.00600	.31060	14.50000	-3.67000	.01000
2.740	8.440	.00610	.30650	14.50000	-3.67000	.02000
2.740	10.630	.00600	.30230	14.50000	-3.67000	.03000
2.740	-.630	.00580	.32590	14.50000	-3.67000	.01000
	GRADIENT	.00004	-.00189	.00000	-.00000	.00123

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (RIN114) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 118/ 0 RN/L = 4.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.598	-11.550	.01250	.28900	14.50000	-.92000	.01000
.598	-9.400	.01200	.28810	14.50000	-.92000	.01000
.598	-7.150	.01170	.28680	14.50000	-.92000	.01000
.598	-4.990	.01160	.28620	14.50000	-.92000	.02000
.598	-2.770	.01130	.28480	14.50000	-.92000	.02000
.598	-.540	.01100	.28020	14.50000	-.92000	.03000
.598	1.640	.01080	.27550	14.50000	-.92000	.03000
.598	3.870	.01070	.26910	14.50000	-.92000	.04000
.598	6.090	.01030	.25870	14.50000	-.92000	.04000
.598	8.360	.01020	.24710	14.50000	-.92000	.05000
.598	10.410	.01010	.23510	14.50000	-.92000	.05000
.598	-.550	.01100	.28190	14.50000	-.92000	.03000
	GRADIENT	-.00010	-.00192	-.00000	.00000	.00226

RUN NO. 117/ 0 RN/L = 6.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.899	-13.210	.01590	.34960	14.50000	-.92000	.03000
.899	-10.740	.01500	.34860	14.50000	-.92000	.02000
.899	-8.130	.01410	.33550	14.50000	-.92000	.02000
.899	-5.660	.01380	.32910	14.50000	-.92000	.03000
.899	-3.240	.01340	.32300	14.50000	-.92000	.04000
.899	-.830	.01260	.32070	14.50000	-.92000	.04000
.899	1.570	.01250	.31590	14.50000	-.92000	.06000
.899	3.950	.01260	.31420	14.50000	-.92000	.07000
.899	6.400	.01260	.31280	14.50000	-.92000	.07000
.899	8.840	.01250	.31210	14.50000	-.92000	.09000
.899	11.080	.01230	.29910	14.50000	-.92000	.09000
.899	-.830	.01280	.32360	14.50000	-.92000	.04000
	GRADIENT	-.00010	-.00130	-.00000	.00000	.00459

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N114) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 119/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.047	-14.180	.01850	.48960	14.50000	-.92000	-.03000
1.047	-11.450	.01830	.48830	14.50000	-.92000	-.01000
1.047	-8.750	.01750	.48440	14.50000	-.92000	.00000
1.047	-6.150	.01730	.47920	14.50000	-.92000	.00000
1.047	-3.590	.01670	.47290	14.50000	-.92000	.01000
1.047	-1.040	.01670	.46850	14.50000	-.92000	.02000
1.047	1.430	.01670	.46260	14.50000	-.92000	.03000
1.047	3.910	.01730	.45660	14.50000	-.92000	.04000
1.047	6.450	.01770	.45110	14.50000	-.92000	.06000
1.047	8.980	.01690	.44150	14.50000	-.92000	.07000
1.047	11.290	.01790	.43490	14.50000	-.92000	.08000
	GRADIENT	.00007	-.00219	-.00000	-.00000	.00400

RUN NO. 118/ 0 RN/L = 6.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.205	-14.900	.01720	.49110	14.50000	-.92000	.01000
1.205	-12.060	.01670	.49860	14.50000	-.92000	.00000
1.205	-9.170	.01590	.49210	14.50000	-.92000	.01000
1.205	-6.420	.01600	.49080	14.50000	-.92000	.02000
1.205	-3.740	.01580	.48890	14.50000	-.92000	.03000
1.205	-1.070	.01620	.48760	14.50000	-.92000	.05000
1.205	1.460	.01620	.48330	14.50000	-.92000	.06000
1.205	3.970	.01620	.47630	14.50000	-.92000	.07000
1.205	6.560	.01630	.47010	14.50000	-.92000	.07000
1.205	9.140	.01610	.45940	14.50000	-.92000	.09000
1.205	11.550	.01650	.45110	14.50000	-.92000	.11000
	GRADIENT	.00005	-.00163	-.00000	-.00000	.00508

MSFC TWT 622 (1A125) LAUNCH VEHICLE. 74 075 (RIN114) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 146/ 0 RN/L = 6.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.462	-14.810	.01390	.47660	14.50000	-.92000	.00000
1.462	-12.040	.01300	.46940	14.50000	-.92000	.02000
1.462	-9.180	.01280	.46470	14.50000	-.92000	.02000
1.462	-6.410	.01270	.45850	14.50000	-.92000	.05000
1.462	-3.730	.01280	.45240	14.50000	-.92000	.04000
1.462	-1.050	.01270	.45180	14.50000	-.92000	.05000
1.462	1.530	.01250	.45080	14.50000	-.92000	.07000
1.462	4.060	.01250	.44910	14.50000	-.92000	.07000
1.462	6.630	.01250	.44580	14.50000	-.92000	.08000
1.462	9.210	.01260	.43800	14.50000	-.92000	.09000
1.462	11.700	.01250	.43330	14.50000	-.92000	.11000
1.462	-1.020	.01260	.45170	14.50000	-.92000	.05000
	GRADIENT	-.00004	-.00042	.00000	-.00000	.00425

RUN NO. 149/ 0 RN/L = 5.13 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
2.740	-12.140	.00490	.36330	14.50000	-.92000	.00000
2.740	-9.940	.00500	.35460	14.50000	-.92000	.00000
2.740	-7.610	.00520	.34540	14.50000	-.92000	.00000
2.740	-5.280	.00550	.33710	14.50000	-.92000	.00000
2.740	-2.980	.00560	.33020	14.50000	-.92000	.00000
2.740	-.680	.00580	.32550	14.50000	-.92000	.01000
2.740	1.570	.00590	.32110	14.50000	-.92000	.01000
2.740	3.840	.00590	.31680	14.50000	-.92000	.01000
2.740	6.120	.00600	.31090	14.50000	-.92000	.02000
2.740	8.440	.00610	.30640	14.50000	-.92000	.02000
2.740	10.630	.00590	.30290	14.50000	-.92000	.03000
2.740	-.620	.00580	.32470	14.50000	-.92000	.01000
	GRADIENT	.00004	-.00196	.00000	-.00000	.00133

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N115) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = 5.000 ELV-IR = .000
ELV-OR = 000

RUN NO. 107/ 0 RN/L = 4.91 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.596	-11.540	.01240	.28930	10.80000	4.50000	.00000
.596	-9.380	.01230	.28980	10.80000	4.50000	.00000
.596	-7.150	.01200	.28970	10.80000	4.50000	.00000
.596	-4.950	.01170	.28730	10.80000	4.50000	.01000
.596	-2.760	.01160	.28660	10.80000	4.50000	.01000
.596	-.540	.01140	.28250	10.80000	4.50000	.02000
.596	1.650	.01100	.27630	10.80000	4.50000	.03000
.596	3.880	.01110	.27020	10.80000	4.50000	.03000
.596	6.100	.01050	.25900	10.80000	4.50000	.04000
.596	8.350	.01070	.24920	10.80000	4.50000	.04000
.596	10.420	.01050	.23540	10.80000	4.50000	.05000
.596	-.540	.01110	.28230	10.80000	4.50000	.02000
	GRADIENT	-.00008	-.00201	-.00000	-.00000	.00272

RUN NO. 108/ 0 RN/L = 6.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.903	-13.130	.01570	.35060	10.80000	4.50000	.01000
.903	-10.660	.01500	.34750	10.80000	4.50000	.02000
.903	-8.160	.01420	.34000	10.80000	4.50000	.03000
.903	-5.670	.01410	.33340	10.80000	4.50000	.04000
.903	-3.250	.01310	.32450	10.80000	4.50000	.04000
.903	-.820	.01290	.32320	10.80000	4.50000	.06000
.903	1.580	.01280	.31990	10.80000	4.50000	.06000
.903	3.950	.01300	.31670	10.80000	4.50000	.08000
.903	6.400	.01310	.31650	10.80000	4.50000	.08000
.903	8.860	.01280	.31350	10.80000	4.50000	.09000
.903	11.130	.01290	.30740	10.80000	4.50000	.09000
.903	-.800	.01290	.32460	10.80000	4.50000	.05000
	GRADIENT	-.00002	-.00111	.00000	.00000	.00500

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 7% OTS (R1N115) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = 5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 104/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.046	-14.130	.01700	.47210	10.80000	4.50000	-.02000
1.046	-11.450	.01570	.47580	10.80000	4.50000	-.01000
1.046	-8.720	.01580	.47370	10.80000	4.50000	-.01000
1.046	-6.120	.01530	.46810	10.80000	4.50000	.00000
1.046	-3.570	.01580	.46380	10.80000	4.50000	.01000
1.046	-1.040	.01580	.45910	10.80000	4.50000	.03000
1.046	1.410	.01620	.45380	10.80000	4.50000	.04000
1.046	3.900	.01580	.44590	10.80000	4.50000	.05000
1.046	6.440	.01640	.44090	10.80000	4.50000	.06000
1.046	8.990	.01590	.43130	10.80000	4.50000	.07000
1.046	11.280	.01720	.42660	10.80000	4.50000	.08000
1.046	-.990	.01620	.45960	10.80000	4.50000	.03000
	GRADIENT	.00002	-.00237	-.00000	.00000	.00523

RUN NO. 105/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.199	-14.930	.01800	.47400	10.80000	4.50000	.00000
1.199	-12.090	.01760	.49070	10.80000	4.50000	.00000
1.199	-9.160	.01670	.48680	10.80000	4.50000	.00000
1.199	-6.390	.01660	.48410	10.80000	4.50000	.02000
1.199	-3.730	.01670	.48500	10.80000	4.50000	.03000
1.199	-1.070	.01680	.48530	10.80000	4.50000	.04000
1.199	1.470	.01690	.47900	10.80000	4.50000	.05000
1.199	3.980	.01710	.47580	10.80000	4.50000	.07000
1.199	6.580	.01660	.46700	10.80000	4.50000	.07000
1.199	9.140	.01680	.45600	10.80000	4.50000	.09000
1.199	11.570	.01710	.44650	10.80000	4.50000	.10000
1.199	-1.020	.01630	.47960	10.80000	4.50000	.04000
	GRADIENT	.00005	-.00132	-.00000	.00000	.00505

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N115) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 10.000
ELV-OL = 5.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 144/ 0 RN/L = 6.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.468	-14.810	.01400	.47300	10.80000	4.50000	.00000
1.468	-12.050	.01300	.46810	10.80000	4.50000	.01000
1.468	-9.180	.01290	.46360	10.80000	4.50000	.02000
1.468	-6.410	.01270	.45720	10.80000	4.50000	.03000
1.468	-3.7[illegible]0	.01280	.45100	10.80000	4.50000	.04000
1.468	-1.050	.01250	.45070	10.80000	4.50000	.05000
1.468	1.520	.01230	.44360	10.80000	4.50000	.06000
1.468	4.050	.01240	.44[illegible]30	10.80000	4.50000	.07000
1.468	6.630	.01230	.44610	10.80000	4.50000	.08000
1.468	9.210	.01220	.43810	10.80000	4.50000	.09000
1.468	11.690	.01250	.43340	10.80000	4.50000	.11000
1.468	-.990	.01250	.45080	10.80000	4.50000	.05000
	GRADIENT	-.00005	-.00044	-.00000	-.00000	.00386

RUN NO. 152/ 0 RN/L = 5.14 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
2.740	-12.130	.00530	.36210	10.80000	4.50000	.00000
2.740	-9.940	.00500	.35450	10.80000	4.50000	.00000
2.740	-7.610	.00520	.34330	10.80000	4.50000	.00000
2.740	-5.280	.00550	.33680	10.80000	4.50000	.00000
2.740	-2.980	.00580	.32860	10.80000	4.50000	.00000
2.740	-.680	.00570	.32530	10.80000	4.50000	.00000
2.740	1.570	.00580	.32100	10.80000	4.50000	.01000
2.740	3.840	.00590	.31680	10.80000	4.50000	.01000
2.740	6.120	.00590	.31200	10.80000	4.50000	.02000
2.740	8.460	.00610	.30850	10.80000	4.50000	.02000
2.740	10.630	.00590	.30490	10.80000	4.50000	.03000
2.740	-.620	.00580	.32600	10.80000	4.50000	.00000
	GRADIENT	.00004	-.00175	-.00000	.00000	.00176

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (RIN116) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 108/ 0 RN/L = 4.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.598	-11.480	.01170	.29070	14.50000	10.80000	.00000
.598	-9.370	.01230	.29310	14.50000	10.80000	.01000
.598	-7.140	.01210	.29240	14.50000	10.80000	.01000
.598	-4.950	.01230	.29130	14.50000	10.80000	.02000
.598	-2.760	.01140	.28740	14.50000	10.80000	.02000
.598	-.520	.01150	.28570	14.50000	10.80000	.03000
.598	1.670	.01150	.27970	14.50000	10.80000	.04000
.598	3.900	.01130	.27390	14.50000	10.80000	.04000
.598	6.150	.01120	.26410	14.50000	10.80000	.05000
598	8.400	.01120	.25290	14.50000	10.80000	.06000
.598	10.450	.01070	.23920	14.50000	10.80000	.06000
.598	-.520	.01160	.28690	14.50000	10.80000	.03000
	GRADIENT	-.00009	-.00192	-.00000	-.00000	.00271

RUN NO. 109/ 0 RN/L = 6.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
.899	-13.130	.01580	.35120	14.50000	10.80000	.02000
.899	-10.660	.01490	.34740	14.50000	10.80000	.03000
.899	-8.130	.01420	.34120	14.50000	10.80000	.04000
.899	-5.660	.01410	.33290	14.50000	10.80000	.04000
.899	-3.220	.01340	.32580	14.50000	10.80000	.06000
.899	-.810	.01290	.32430	14.50000	10.80000	.06000
.899	1.600	.01320	.32290	14.50000	10.80000	.06000
.899	4.000	.01290	.31600	14.50000	10.80000	.09000
.899	6 420	.01300	.31560	14.50000	10.80000	.09000
.899	8.870	.01290	.31280	14.50000	10.80000	.10000
.899	11.110	.01320	.30450	14.50000	10.80000	.10000
.899	-.790	.01290	.32560	14.50000	10.80000	.06000
	GRADIENT	-.00005	-.00128	.00000	.00000	.003[illegible]4

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 74 OTS (R1N116) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 111/ 0 RN/L = 6.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.046	-14.160	.01830	.49200	14.50000	10.80000	-.02000
1.046	-11.440	.01800	.49140	14.50000	10.80000	-.01000
1.046	-8.740	.01740	.48880	14.50000	10.80000	.00000
1.046	-6.110	.01700	.48260	14.50000	10.80000	.00000
1.046	-3.580	.01680	.47780	14.50000	10.80000	.01000
1.046	-1.020	.01740	.47280	14.50000	10.80000	.03000
1.046	1.450	.01750	.46730	14.50000	10.80000	.04000
1.046	3.930	.01800	.46150	14.50000	10.80000	.06000
1.046	6.480	.01720	.45370	14.50000	10.80000	.06000
1.046	9.000	.01750	.44430	14.50000	10.80000	.08000
1.046	11.300	.01890	.44050	14.50000	10.80000	.09000
1.046	-.980	.01770	.47340	14.50000	10.80000	.03000
	GRADIENT	.00015	-.00218	-.00000	.00000	.00640

RUN NO. 110/ 0 RN/L = 6.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.197	-14.890	.01720	.48900	14.50000	10.80000	.01000
1.197	-12.040	.01690	.50110	14.50000	10.80000	.01000
1.197	-9.130	.01670	.49890	14.50000	10.80000	.02000
1.197	-6.380	.01630	.49540	14.50000	10.80000	.03000
1.197	-3.710	.01640	.49400	14.50000	10.80000	.05000
1.197	-1.070	.01650	.49300	14.50000	10.80000	.06000
1.197	1.480	.01630	.48680	14.50000	10.80000	.07000
1.197	4.000	.01630	.48100	14.50000	10.80000	.08000
1.197	6.590	.01670	.47540	14.50000	10.80000	.09000
1.197	9.140	.01640	.46310	14.50000	10.80000	.10000
1.197	11.580	.01690	.45560	14.50000	10.80000	.11000
1.197	-1.040	.01630	.49270	14.50000	10.80000	.05000
	GRADIENT	-.00002	-.00176	.00000	.00000	.00389

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74 OTS (R1N116) (04 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = 15.000
ELV-OL = 10.000 ELV-IR = .000
ELV-OR = .000

RUN NO. 147/ 0 RN/L = 6.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
1.465	-14.820	.01390	.47840	14.50000	10.80000	.00000
1.465	-12.050	.01310	.47200	14.50000	10.80000	.02000
1.465	-9.190	.01300	.46770	14.50000	10.80000	.02000
1.465	-6.420	.01280	.46110	14.50000	10.80000	.05000
1.465	-3.720	.01280	.45600	14.50000	10.80000	.04000
1.465	-1.060	.01260	.45490	14.50000	10.80000	.05000
1.465	1.530	.01250	.45380	14.50000	10.80000	.07000
1.465	4.060	.01250	.45320	14.50000	10.80000	.08000
1.465	6.620	.01250	.45010	14.50000	10.80000	.08000
1.465	9.200	.01260	.44190	14.50000	10.80000	.09000
1.465	11.700	.01270	.43530	14.50000	10.80000	.11000
1.465	-1.030	.01270	.45570	14.50000	10.80000	.05000
	GRADIENT	-.00004	-.00037	.00000	-.00000	.00540

RUN NO. 148/ 0 RN/L = 5.12 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA	ELV-IL	ELV-OL	BETA
2.740	-12.120	.00500	.36550	14.50000	10.80000	.00000
2.740	-9.930	.00500	.35630	14.50000	10.80000	.00000
2.740	-7.600	.00520	.34580	14.50000	10.80000	.00000
2.740	-5.260	.00550	.33770	14.50000	10.80000	.00000
2.740	-2.960	.00560	.33050	14.50000	10.80000	.00000
2.740	-.670	.00580	.32700	14.50000	10.80000	.01000
2.740	1.590	.00590	.32150	14.50000	10.80000	.01000
2.740	3.850	.00590	.31800	14.50000	10.80000	.01000
2.740	6.140	.00590	.31370	14.50000	10.80000	.01000
2.740	8.460	.00610	.31000	14.50000	10.80000	.02000
2.740	10.640	.00600	.30630	14.50000	10.80000	.03000
2.740	-.470	.00330	.32130	14.50000	10.80000	.00000
	GRADIENT	.00004	-.00189	.00000	.00000	.00133

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740TS+Z13 (RIN117) (25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 978.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 67/ 0 RN/L = 6.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
.798	-12.850	.01420	.01310	-.00770	.34450
.798	-10.550	.01410	.01260	-.00530	.34440
.798	-8.120	.01320	.00760	-.00260	.33460
.798	-5.780	.01280	.00840	-.00100	.33040
.798	-3.420	.01250	.00670	-.00100	.32840
.798	-1.050	.01200	.00700	.00000	.32550
.798	1.240	.01170	.00580	.00270	.32070
.798	3.620	.01100	.00360	.00390	.31220
.798	6.030	.01110	-.00130	.00380	30440
.798	8.440	.01100	-.00800	-.00100	.29140
.798	10.640	.01090	-.01220	-.00910	.28160
.798	-1.050	.01200	.00520	.00040	.32600
	GRADIENT	-.00021	-.00045	.00074	-.00228

RUN NO. 66/ 0 RN/L = 6.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
.899	-13.390	.01580	.02010	-.00140	.37510
.899	-10.980	.01470	.02600	.00210	.37010
.899	-8.470	.01420	.03220	.00430	.36500
.899	-6.020	.01380	.02930	.00470	.36080
.899	-3.590	.01300	.02560	.00370	.35320
.899	-1.180	.01320	.01990	-.00060	.35620
.899	1.200	.01230	.02450	.00330	.34740
.899	3.630	.01230	.01860	.00230	.33830
.899	6.150	.01220	.01120	-.00580	.33380
.899	8.630	.01240	.00850	-.01300	.32920
.899	10.920	.01250	.00700	-.01870	.31980
.899	-1.170	.01300	.01870	-.00280	.35620
	GRADIENT	-.00012	-.00069	-.00001	-.00223

MSFC TWT 622 (!A125) LAUNCH VEHICLE, 740TS+Z13 (R1N117) (25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 63/ 0 RN/L = 6.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
.997	-14.080	.01810	.01710	.03450	.48620
.997	-11.560	.01870	.01120	.03410	.50460
.997	-8.900	.01780	.01000	.02940	.49230
.997	-6.350	.01730	.00740	.02850	.48810
.997	-3.840	.01700	.00580	.02730	.48800
.997	-1.330	.01680	.00440	.02460	.48290
.997	1.080	.01680	-.00110	.01590	.47070
.997	3.580	.01710	-.00570	.00600	.46730
.997	6.120	.01550	-.00770	-.00630	.44750
.997	8.700	.01590	-.00700	-.00530	.44950
.997	11.020	.01640	-.00660	-.00560	.43210
.997	-1.280	.01630	.00540	.01880	.45930
	GRADIENT	.00001	-.00162	-.00294	-.00301

RUN NO. 62/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
1.048	-14.370	.01790	.01450	.05060	.51140
1.048	-11.740	.01690	.00600	.04390	.51670
1.048	-9.040	.01710	.00420	.03830	.51600
1.048	-6.450	.01670	.00040	.03460	.51100
1.048	-3.910	.01600	-.00040	.03180	.50430
1.048	-1.370	.01570	-.00200	.02800	.49730
1.048	1.100	.01560	-.00500	.01740	.48580
1.048	3.600	.01640	-.00640	.00950	.47600
1.048	6.170	.01560	-.00800	.00400	.46460
1.048	8.730	.01570	-.00710	.00280	.45300
1.048	11.060	.01600	-.00880	.00310	.44110
1.048	-1.340	.01640	-.00220	.02320	.49890
	GRADIENT	.00004	-.00084	-.00310	-.00385

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+Z13 (R1N117) (25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 61/ 0 RN/L = 6.80 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
1.106	-14.600	.01620	.01540	.06870	.51230
1.106	-11.900	.01570	.00510	.06180	.52080
1.106	-9.190	.01550	-.00180	.05620	.52040
1.106	-6.570	.01560	-.00470	.05140	.51830
1.106	-4.000	.01530	-.00610	.04710	.51140
1.106	-1.390	.01470	-.00630	.03960	.50140
1.106	1.110	.01440	-.00420	.03110	.48750
1.106	3.650	.01450	-.00440	.02420	.47500
1.106	6.270	.01410	-.00850	.02110	.46400
1.106	8.810	.01420	-.01050	.01820	.44870
1.106	11.160	.01460	-.01390	.01910	.43790
1.106	-1.360	.01510	-.00690	.03440	.50230
	GRADIENT	-.00011	.00028	-.00303	-.00483

RUN NO. 64/ 0 RN/L = 6.86 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
1.149	-14.680	.01410	.01310	.07800	.49420
1.149	-11.990	.01400	.00400	.07020	.50410
1.149	-9.260	.01380	-.00210	.06410	.50300
1.149	-6.610	.01370	-.00490	.05820	.49780
1.149	-3.990	.01440	-.00690	.05380	.49690
1.149	-1.400	.01360	-.00710	.04740	.48940
1.149	1.140	.01360	-.00310	.04090	.47450
1.149	3.680	.01410	-.00480	.03370	.46260
1.149	6.300	.01360	-.01050	.03130	.44760
1.149	8.870	.01290	-.01660	.02810	.43210
1.149	11.260	.01260	-.01990	.02600	.41920
1.149	-1.360	.01320	-.00840	.04290	.48670
	GRADIENT	-.00004	.00040	-.00261	-.00461

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740TS+Z13 (R1N117) (25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 65/ 0 RN/L = 6.92 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
1.252	-15.280	.01690	.01440	.08980	.50940
1.252	-12.440	.01610	.00240	.08340	.51300
1.252	-9.520	.01570	-.00390	.08270	.51030
1.252	-6.710	.01530	-.00710	.07990	.50280
1.252	-3.990	.01520	-.00580	.07770	.49490
1.252	-1.280	.01440	-.00800	.07660	.48380
1.252	1.280	.01450	-.01190	.08120	.47960
1.252	3.780	.01490	-.02040	.07940	.47530
1.252	6.380	.01470	-.02890	.07300	.46940
1.252	8.970	.01400	-.03820	.05960	.45520
1.252	11.400	.01440	-.04030	.05900	.44700
1.252	-1.260	.01470	-.0[illegible]030	.07720	.48730
	GRADIENT	-.00003	-.00183	.00037	-.00245

MSFC TWT 622 (A125) LAUNCH VEHICLE, 74075+213 (R1N118) (25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO 56/ 0 RN/L = 5.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CHEO	CHEI	CA
.798	-11.420	.01340	.00950	.02820	.32740
.798	-9.270	.01200	.00990	.02620	.33030
.798	-7.030	.01210	.01000	.02360	.32940
.798	-4.790	.01200	.01050	.01980	.33020
.798	-2.550	.01180	.01320	.01690	.32960
.798	-.320	.01150	.01400	.01050	.32350
.798	1.880	.01230	.00810	.00240	.32850
.798	4.090	.01230	.00730	.00170	.32870
.798	6.340	.01300	.00160	-.00450	.33040
.798	8.550	.01330	-.00320	-.00690	.33180
.798	10.660	.01370	-.00970	-.00790	.33080
.798	-.310	.01160	.01220	.00670	.32410
	GRADIENT	.00005	-.00052	-.00228	-.00019

RUN NO. 57/ 0 RN/L = 6.35 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CHEO	CHEI	CA
.901	-11.670	.01460	.01780	.02400	.35460
.901	-9.480	.01410	.01590	.01850	.36210
.901	-7.200	.01370	.01700	.01350	.36460
.901	-4.910	.01320	.02280	.01600	.36380
.901	-2.610	.01300	.02090	.01450	.35170
.901	-.320	.01250	.02300	.01100	.35090
.901	1.920	.01360	.02770	.00200	.35740
.901	4.150	.01420	.03270	.00060	.36090
.901	6.450	.01470	.02110	-.00740	.36480
.901	8.740	.01530	.00830	-.01150	.36600
.901	10.860	.01590	-.00090	-.01380	.36220
.901	-.320	.01280	.02170	.00560	.35200
	GRADIENT	.00011	.00117	-.00191	-.00045

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+Z13 (R1N118) : 25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 59/ 0 RN/L = 6.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CHEO	CHEI	CA
1.046	-12.040	.01600	.00130	.03390	.47650
1.046	-9.700	.01610	.00110	.02630	.48380
1.046	-7.330	.01540	.00050	.02150	.48910
1.046	-5.000	.01540	-.00010	.01930	.49540
1.046	-2.660	.01540	.00210	.02320	.49810
1.046	-.340	.01580	.00110	.02430	.49500
1.046	1.970	.01610	.00310	.02020	.49790
1.046	4.270	.01650	.00720	.01710	.49820
1.045	6.600	.01690	.01010	.01300	.49630
1.046	8.980	.01550	.00170	.00890	.49020
1.046	11.200	.01730	.00870	.00110	.48140
1.046	-.320	.01520	.00150	.02010	.49210
	GRADIENT	.00013	.00067	-.00032	.00023

RUN NO. 60/ 0 RN/L = 6.82 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CHEO	CHEI	CA
1.103	-12.140	.01560	-.00040	07460	.48970
1.103	-9.790	.01520	.00230	.06380	.49440
1.103	-7.380	.01490	.00020	.05020	.49760
1.103	-5.030	.01490	-.00060	.04480	.50320
1.103	-2.670	.01450	-.00290	.03900	.50650
1.103	-.330	.01510	-.00590	.03810	.50640
1.103	1.980	.01550	-.00400	.03300	.50910
1.103	4.300	.01550	-.00050	.03090	.50830
1.103	6.650	.01620	.00410	.02880	.50720
1.103	9.050	.01650	.00630	.02390	.50330
1.103	11.310	.01610	.00490	.01850	.49220
1.103	-.310	.01520	-.00580	.03150	.50840
	GRADIENT	.00015	.00039	-.00127	.00035

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740TS+Z13 (R1N118) (25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 58/ 1 RN/L = 6.85 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CHEO	CHEI	CA
1.264	-12.400	.01460	-.01910	.03720	.47740
1.264	-9.990	.01380	-.01900	.09520	.47890
1.264	-7.520	.01360	-.01790	.09310	.47880
1.264	-5.090	.01320	-.01610	.09460	.47840
1.264	-2.700	.01320	-.01390	.08830	.47630
1.264	-.340	.01340	-.01040	.08060	.47320
1.264	2.000	.01320	-.00480	.06580	.47640
1.264	4.360	.01340	-.00070	.05580	.47870
1.264	6.770	.01390	-.00070	.04640	.48040
1.264	9.230	.01460	-.00200	.04420	.48230
1.264	11.550	.01540	-.00170	.04290	.48300
1.264	-.310	.01340	-.00790	.07240	.47320
	GRADIENT	.00002	.00192	-.00477	.00044

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740*S+Z13 (R1N119) (25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 44/ 0 RN/L = 5.88 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
.801	-12.680	.01310	.04600	.04030	.31470
.801	-10.380	.01270	.03440	.03610	.30920
.801	-7.950	.01220	.02890	.03320	.30150
.801	-5.620	.01180	.02570	.03200	.29590
.801	-3.270	.01150	.02450	.03120	.29290
.801	-.870	.01110	.02990	.03250	.28970
.801	1.430	.01100	.03230	.03450	.28620
.801	3.790	.01060	.03120	.03520	.28040
.801	6.190	.01080	.02570	.03460	.27330
.801	8.600	.01070	.01710	.03320	.26610
.801	10.730	.01080	.00110	.02660	.26290
.801	-.830	.01120	.02840	.03270	.28930
	GRADIENT	-.00013	.00095	.00060	-.00175

RUN NO. 45/ 0 RN/L = 6.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
.902	-13.340	.01470	.05500	.05130	.34440
.902	-10.860	.01400	.05650	.04440	.34160
.902	-8.330	.01370	.04180	.03340	.33410
.902	-5.830	.01320	.03870	.02470	.32480
.902	-3.350	.01270	.03260	.01770	.32060
.902	-.950	.01240	.03120	.02110	.31300
.902	1.410	.01200	.03340	.02330	.31010
.902	3.780	.01180	.03340	.02280	.30980
.902	6.240	.01200	.03350	.02290	.30900
.902	8.690	.01210	.02630	.02310	.30840
.902	10.950	.01170	.01090	.01760	.29990
.902	-.950	.01210	.03010	.02160	.31340
	GRADIENT	-.00013	.00019	.00074	-.00148

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+Z13 (R1N1119) (25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 47/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
.999	-14.030	.01810	.10400	.12170	.45870
.999	-11.360	.01730	.09160	.10250	.45200
.999	-8.740	.01680	.09330	.09220	.45670
.999	-6.190	.01620	.09140	.08590	.45240
.999	-3.620	.01570	.08820	.07310	.43020
.999	-1.100	.01470	.08590	.07010	.41980
.999	1.280	.01600	.07440	.07020	.43350
.999	3.770	.01600	.05420	.05900	.42860
.999	6.270	.01580	.04190	.05930	.42770
.999	8.810	.01580	.02730	.06270	.41900
.999	11.090	.01550	.00650	.05670	.40350
.999	-1.070	.01580	.08320	.06990	.43170
	GRADIENT	.00009	-.00462	-.00172	.00034

RUN NO. 48/ 0 RN/L = 6.58 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
1.047	-14.200	.01730	.10800	.14030	.47510
1.047	-11.580	.01540	.09330	.12090	.47000
1.047	-8.860	.01450	.09320	.10620	.46340
1.047	-6.260	.01480	.09160	.09640	.45930
1.047	-3.700	.01460	.09310	.09180	.45470
1.047	-1.130	.01460	.09090	.09080	.44960
1.047	1.290	.01440	.07340	.08500	.44700
1.047	3.770	.01400	.05490	.07380	.43770
1.047	6.320	.01450	.04180	.07210	.43290
1.047	8.860	.01390	.02400	.07210	.42300
1.047	11.140	.01470	.00580	.06740	.41490
1.047	-1.100	.01430	.08630	.08700	.44940
	GRADIENT	-.00008	-.00530	-.00240	-.00216

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+Z13 (RINI19) (25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 CPBINC = .000
SPOILR = .000

RUN NO. 49/ 0 RN/L = 6.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
1.101	-14.480	.01730	.11330	.16250	.48660
1.101	-11.760	.01550	.09640	.14270	.48330
1.101	-9.020	.01470	.08790	.12790	.48100
1.101	-6.400	.01450	.08770	.11990	.47590
1.101	-3.800	.01440	.09000	.11500	.47160
1.101	-1.200	.01390	.08390	.11240	.46560
1.101	1.280	.01380	.05700	.10370	.45840
1.101	3.770	.01380	.04840	.09060	.44970
1.101	6.350	.01370	.03060	.08310	.44270
1.101	8.910	.01330	.01040	.07530	.42940
1.101	11.220	.01370	-.00790	.07510	.41890
1.101	-1.170	.01400	.07950	.10700	.46510
	GRADIENT	-.00008	-.00561	-.00324	-.00289

RUN NO. 50/ 0 RN/L = 6.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CHEO	CHEI	CA
1.149	-14.730	.01690	.11290	.17350	.49650
1.149	-12.000	.01560	.09390	.15550	.49200
1.149	-9.200	.01530	.08480	.14110	.49040
1.149	-6.510	.01480	.08260	.13200	.48260
1.149	-3.870	.01420	.08550	.12820	.47570
1.149	-1.220	.01370	.07500	.12670	.47070
1.149	1.300	.01380	.05430	.12030	.46550
1.149	3.820	.01400	.03440	.11080	.46140
1.149	6.460	.01390	.01480	.09920	.45490
1.149	8.980	.01430	-.00520	.08480	.44330
1.149	11.350	.01490	-.02350	.08310	.43570
1.149	-1.160	.01330	.06910	.12070	.46310
	GRADIENT	-.00002	-.00679	-.00228	-.00188

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 74C'S+Z13 (RIN120) (25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 55/ 0 RN/L = 5.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CHEO	CHEI	CA
.800	-11.400	.01380	.03320	.06530	.30440
.800	-9.270	.01250	.03290	.05140	.30360
.800	-7.010	.01200	.03220	.05690	.30280
.800	-4.790	.01180	.03110	.05090	.29950
.800	-2.550	.01150	.02940	.04540	.29920
.800	-.310	.01120	.02870	.03910	.29210
.800	1.880	.01170	.02570	.03290	.29800
.800	4.090	.01220	.02290	.03190	.30270
.800	6.340	.01270	.02110	.02580	.30060
.800	8.600	.01330	.01750	.02350	.30590
.800	10.650	.01370	.01380	.02190	.30680
.800	-.310	.01170	.02840	.03590	.29470
	GRADIENT	.00004	-.00090	-.00229	.00023

RUN NO. 54/ 0 RN/L = 6.25 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CHEO	CHEI	CA
.900	-11.660	.01470	.03990	.07190	.33780
.900	-9.470	.01380	.03990	.06800	.34140
.900	-7.170	.01310	.03870	.06030	.33860
.900	-4.880	.01280	.03740	.05130	.33390
.900	-2.600	.01220	.03560	.04190	.32540
.900	-.300	.01210	.03320	.03070	.31740
.900	1.940	.01270	.02620	.01280	.32170
.900	4.190	.01360	.01750	.00930	.32690
.900	6.460	.01410	.01210	.00360	.33200
.900	8.770	.01560	.00390	-.00060	.34260
.900	10.910	.01610	.00120	-.00110	.34140
.900	-.330	.01190	.03130	.02430	.31810
	GRADIENT	.00009	-.00217	-.00499	-.00079

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+Z13 (R1N120) (25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 52/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CHEO	CHEI	CA
1.048	-12.040	.01660	.05490	.15390	.46250
1.048	-9.740	.01570	.05430	.14460	.46540
1.049	-7.330	.01500	.05820	.12700	.46760
1.048	-4.990	.01480	.06710	.10780	.46710
1.048	-2.660	.01430	.07500	.09800	.46400
1.048	-.310	.01430	.08290	.09320	.45740
1.049	1.980	.01500	.08330	.07270	.46240
1.048	4.260	.01610	.07700	.05790	.46590
1.048	6.640	.01720	.06820	.04680	.47180
1.048	9.030	.01690	.06120	.04020	.46850
1.048	11.270	.01770	.04950	.03210	.46510
1.048	-.280	.01470	.08430	.08550	.45940
	GRADIENT	.00014	.00122	-.00539	-.00018

RUN NO. 51/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CHEO	CHEI	CA
1.098	-12.160	.01730	.02520	.17980	.48760
1.099	-9.810	.01680	.03480	.16540	.49050
1.098	-7.370	.01670	.04770	.15040	.49150
1.098	-5.020	.01610	.06100	.14410	.48990
1.098	-2.660	.01590	.06920	.13390	.48780
1.098	-.300	.01610	.07630	.12750	.48660
1.099	2.000	.01660	.08140	.10330	.49030
1.098	4.320	.01690	.08200	.08850	.49240
1.098	6.720	.01770	.07750	.07670	.49550
1.099	9.110	.01840	.07350	.06790	.49670
1.098	11.410	.01820	.06440	.06130	.49390
1.098	-.300	.01620	.07770	.11660	.48600
	GRADIENT	.00015	.00187	-.00689	.00075

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+Z13 (RIN120) (25 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 53/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CHEO	CHEI	CA
1.251	-12.380	.01510	-.01920	.15290	.47380
1.251	-9.980	.01490	-.01780	.14830	.47590
1.251	-7.490	.01440	-.01420	.14500	.47470
1.251	-5.080	.01400	-.00440	.14390	.47230
1.251	-2.690	.01400	.00810	.13590	.46960
1.251	-.310	.01390	.02120	.12700	.46450
1.251	2.000	.01390	.03350	.11300	.46850
1.251	4.370	.01430	.04480	.10290	.47240
1.251	6.790	.01500	.05860	.09420	.47580
1.251	9.260	.01570	.06310	.08820	.47850
1.251	11.600	.01580	.06250	.08270	.47610
1.251	-.300	.01360	.02460	.11930	.46280
	GRADIENT	.00004	.00521	-.00481	.00053

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN121) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 15/ 0 RN/L = 5.93 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
.798	-6.890	.01370	.31200
.798	-4.710	.01260	.30490
.798	-2.470	.01250	.30330
.798	-.270	.01190	.29990
.798	1.920	.01180	.29610
.798	4.180	.01170	.29070
.798	6.410	.01180	.28170
.798	-.270	.01240	.30820
	GRADIENT	-.00011	-.00161

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (R1N121) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 16/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
.897	-7.010	.01470	.35620
.897	-4.740	.01440	.35190
897	-2.510	.01370	.34330
897	-.270	01370	.34090
897	1.950	.01290	.32530
897	4.190	.01290	.32050
.897	6.510	.01310	.31970
.897	-.270	.01340	.34280
	GRADIENT	-.00017	-.00361

RUN NO. 18/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
996	-7.050	.01510	.44190
995	-4.750	.01450	.43470
.996	-2.440	.01390	.42740
.996	-.190	.01420	.44120
996	2.040	.01410	.42510
.996	4.300	.01500	.43550
.996	6.610	.01430	.41720
.996	-.200	.01330	.41970
	GRADIENT	.00004	-.00003

RUN NO. 19/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.049	-7.070	.01680	.48680
1.049	-4.760	.01660	.48150
1.049	-2.440	.01630	.47750
1.049	-.180	.01580	.47070
1.049	2.100	.01530	.46030
1.049	4.360	.01600	.45830
1.049	6.690	.01590	.44990
1.049	-.180	.01550	.46990
	GRADIENT	-.00010	-.00279

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN121) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 20/ 0 RN/L = 6.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.103	-7.150	.01730	.50430
1.103	-4.800	.01680	.49920
1.103	-2.460	.01670	.49500
1.103	-.180	.01640	.49060
1.103	2.120	.01680	.48310
1.103	4.380	.01660	.47560
1.103	6.720	.01640	.46590
1.103	-.180	.01640	.49140
	GRADIENT	-.00001	-.00257

RUN NO. 21/ 0 RN/L = 6.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.146	-7.240	.01770	.51290
1.146	-4.850	.01780	.50850
1.146	-2.470	.01770	.50710
1.146	-.140	.01770	.50220
1.146	2.140	.01760	.49430
1.146	4.430	.01750	.48980
1.146	6.770	.01790	.48340
1.146	-.150	.01760	.50240
	GRADIENT	-.00003	-.00216

RUN NO. 17/ 0 RN/L = 6.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.252	-7.300	.01790	.49780
1.252	-4.900	.01720	.49070
1.252	-2.510	.01690	.48890
1.252	-.150	.01690	.48850
1.252	2.140	.01690	.48490
1.252	4.460	.01690	.47840
1.252	6.790	.01720	.47510
1.252	-.150	.01650	.48470
	GRADIENT	-.00003	-.00122

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RINI21) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 41/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.459	-7.340	.01380	.46230
1.459	-4.930	.01330	.45640
1.459	-2.530	.01300	.45540
1.459	-.160	.01290	.45320
1.459	2.170	.01290	.44920
1.459	4.470	.01280	.44750
1.459	6.800	.01280	.44410
1.459	[illegible]	.01290	.45330
	GRADIENT	-.00005	-.00102

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RINI22) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 39/ 0 RN/L = 6.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
.798	-6.910	.01290	.32320
.798	-4.720	.01540	.32090
.798	-2.490	.01200	.32080
.798	-.280	.01140	.31720
.798	1.910	.01170	.31360
.798	4.170	.01190	.30870
.798	6.380	.01220	.29950
.798	-.290	.01150	.31790
	GRADIENT	-.00033	-.00142

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (R1N122) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 38/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
.902	-7.030	.01360	.35620
.902	-4.750	.01380	.35850
.902	-2.530	.01660	.35740
.902	-.300	.01270	.34940
.902	1.920	.01290	.34760
.902	4.190	.01320	.34300
.902	6.480	.01360	.33910
.902	-.290	.01340	.36180
	GRADIENT	-.00022	-.00183

RUN NO. 37/ 0 RN/L = 6.61 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
.995	-7.110	.01500	.45740
.995	-4.790	.01470	.45380
.995	-2.490	.01370	.44430
.995	-.250	.01320	.43570
.995	2.010	.01470	.44920
.995	4.260	.01450	.43340
.995	6.590	.01540	.44010
.995	-.250	.01340	.43480
	GRADIENT	.00003	-.00159

RUN NO. 38/ 0 RN/L = 6.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.047	-7.130	.01670	.50370
1.047	-4.800	.01630	.49850
1.047	-2.470	.01600	.49360
1.047	-.220	.01560	.48660
1.047	2.070	.01620	.47900
1.047	4.340	.01610	.47330
1.047	6.660	.01630	.46240
1.047	-.210	.01580	.48600
	GRADIENT	-.00001	-.00285

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 770747S+213 (R1N122) (19 JUN 75)

REFERENCE DATA

SREF = 2690 0000 SQ FT XMRP = 976 0000 IN. XT
LREF = 1290 3000 INCHES YMRP = 0000 IN. YT
BREF = 1290 3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = 0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 33/ 0 RN/L = 6.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.100	-7.160	.01600	.51060
1.100	-4.820	.01530	.50430
1.100	-2.480	.01500	.49960
1.100	-.200	.01500	.49460
1.100	2.070	.01510	.48490
1.100	4.360	.01560	.47870
1.100	6.700	.01520	.46520
1.100	-.200	.01500	.49550
	GRADIENT	.00003	-.00287

RUN NO 34/ 0 RN/L = 6.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.151	-7.260	.01740	.53120
1.151	-4.870	.01730	.52610
1.151	-2.490	.01740	.52390
1.151	-.160	.01780	.51970
1.151	2.220	.01750	.50810
1.151	4.430	.01740	.50150
1.151	6.760	.01770	.49200
1.151	-.160	.01760	.51920
	GRADIENT	.00001	-.00279

RUN NO 35/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.252	-7.260	.01790	.52040
1.252	-4.890	.01730	.50810
1.252	-2.490	.01720	.50470
1.252	-.130	.01720	.49960
1.252	2.150	.01750	.49370
1.252	4.470	.01790	.49130
1.252	6.800	.01822	.48770
1.252	-.130	.01720	.50100
	GRADIENT	.00006	-.00191

MSFC TWT 622 (IA 25 LAUNCH VEHICLE, 77074TS+Z13 (RIN122) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 40/ 1 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.460	-7.330	.01360	.47200
1.460	-4.930	.01320	.46370
1.460	-2.520	.01320	.46130
1.460	-.160	.01330	.45920
1.460	2.180	.01330	.45540
1.460	4.450	.01310	.45140
1.460	6.810	.01330	.44900
1.460	-.170	.01310	.45780
	GRADIENT	- .00000	-.00130

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN123) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 27/ 0 RN/L = 6.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
.795	-6.440	.01330	.30910
.795	-4.320	.01300	.30860
.795	-2.190	.01280	.30750
.795	-.100	.01220	.30210
.795	2.000	.01190	.30190
.795	4.100	.01280	.30540
.795	6.200	.01330	.30740
.795	- 100	.01220	.30310
	GRADIENT	-.00006	-.00057

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (R1N123) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 OPBINC = .000
SPOILR = 20.000

RUN NO. 26/ 0 RN/L = 6.36 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
.904	-6.530	.01430	.35050
.904	-4.380	.01430	.35240
.904	-2.220	.01410	.34170
.904	-.090	.01300	.33440
.904	2.020	.01330	.33600
.904	4.140	.01350	.34220
.904	6.270	.01440	.35030
.904	-.090	.01340	.34260
	GRADIENT	-.00011	-.00123

RUN NO. 24/ 0 RN/L = 6.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
.997	-6.530	.01340	.41810
.997	-4.390	.01210	.40630
.997	-2.230	.01200	.40720
.997	-.100	.01260	.41780
.997	2.020	.01220	.40360
.997	4.150	.01370	.42790
.997	6.300	.01390	.41760
.997	-.100	.01250	.41220
	GRADIENT	.00016	.00186

RUN NO. 23/ 0 RN/L = 6.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
1.049	-6.560	.01540	.46820
1.049	-4.410	.01520	.46870
1.049	-2.240	.01480	.46710
1.049	-.100	.01500	.46540
1.049	2.020	.01490	.46550
1.049	4.160	.01510	.46500
1.049	6.330	.01550	.46520
1.049	-.100	.01500	.46560
	GRADIENT	-.00000	-.00042

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (R1N123) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 22/ 0 RN/L = 6.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
1.105	-6.620	.01670	.49650
1.105	-4.450	.01630	.49530
1.105	-2.260	.01590	.49310
1.105	-.110	.01610	.49170
1.105	2.030	.01630	.49230
1.105	4.180	.01630	.49090
1.105	6.360	.01670	.49080
1.105	-.100	.01580	.48570
	GRADIENT	.00002	-.00045

RUN NO. 25/ 0 RN/L = 6.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
1.249	-6.700	.01530	.48440
1.249	-4.490	.01500	.47900
1.249	-2.280	.01510	.47460
1.249	-.110	.01530	.47370
1.249	2.060	.01520	.47740
1.249	4.230	.01590	.48190
1.249	6.440	.01630	.48340
1.249	-.110	.01480	.46800
	GRADIENT	.00009	.00039

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RINT24) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 28/ 0 RN/L = 6.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
.802	-6.450	.01330	.33070
.802	-4.350	.01280	.32890
.802	-2.190	.01240	.32540
.802	-.100	.01190	.31920
.802	2.000	.01190	.31950
.802	4.110	.01230	.32250
.802	6.210	.01300	.32520
.802	-.100	.01180	.32340
	GRADIENT	-.00007	-.00093

RUN NO. 29/ 0 RN/L = 6.35 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
.898	-6.510	.01480	.35690
.899	-4.380	.01400	.35930
.899	-2.230	.01340	.35380
.899	-.090	.01310	.35060
.899	2.020	.01310	.35170
.898	4.150	.01350	.35580
.899	6.270	.01410	.35890
.898	-.090	.01310	.35150
	GRADIENT	-.00006	-.00042

RUN NO 31/ 0 RN/L = 6.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
1.049	-6.600	.01590	.48980
1.049	-4.430	.01570	.49150
1.049	-2.250	.01530	.49110
1.049	-.100	.01540	.48920
1.049	2.010	.01570	.49000
1.049	4.150	.01590	.49160
1.049	6.340	.01630	.49120
1.049	-.100	.01550	.48830
	GRADIENT	.00004	-.00004

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN124) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0D+0

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 32/ 0 RN/L = 6.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
1.103	-6.640	.01430	.48570
1.103	-4.450	.01470	.49360
1.103	-2.270	.01450	.49290
1.103	-.110	.01460	.49160
1.103	2.010	.01460	.49340
1.103	4.160	.01490	.49400
1.103	6.360	.01560	.49450
1.103	-.110	.01460	.49200
	GRADIENT	.00002	.00006

RUN NO. 30/ 0 RN/L = 6.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
1.252	-6.690	.01750	.50630
1.252	-4.480	.01730	.50180
1.252	-2.290	.01690	.49760
1.252	-.110	.01700	.49410
1.252	2.050	.01730	.50060
1.252	4.240	.01730	.49950
1.252	6.440	.01770	.50400
1.252	-.110	.01650	.48890
	GRADIENT	.00002	-.00008

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 770747S+Z13 (RIN125) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 1/ 1 RN/L = 5.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
.800	-6.890	.01350	.29740
.800	-4.700	.01260	.29470
.800	-2.460	.01240	.29360
.800	-.260	.01200	.29020
.800	1.960	.01200	.28500
.800	4.200	.01190	.28010
.800	6.430	.01160	.27230
.800	-.250	.01210	.29130
	GRADIENT	-.00008	-.00165

RUN NO. 2/ 0 RN/L = 6.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
.902	-7.000	.01460	.33750
.902	-4.710	.01420	.33250
.902	-2.480	.01330	.32920
.902	-.270	.01330	.32560
.902	1.960	.01260	.31280
.902	4.210	.01270	.31440
.902	6.500	.01280	.31380
.902	-.270	.01290	.32600
	GRADIENT	-.00017	-.00236

RUN NO. 4/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
.995	-7.030	.01510	.40910
.995	-4.740	.01520	.42490
.995	-2.440	.01430	.41790
.995	-.210	.01400	.41190
.995	2.060	.01440	.41870
.995	4.290	.01420	.40990
.995	6.590	.01400	.40100
.995	-.210	.01310	.39810
	GRADIENT	-.00008	-.00129

MSFC TWT 622 (!A125) LAUNCH VEHICLE, 77074TS+Z13 (RIN125) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 5/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.049	-7.070	.01640	.46570
1.049	-4.760	.01620	.46210
1.049	-2.430	.01620	.46010
1.049	-.170	.01600	.45660
1.049	2.100	.01610	.45100
1.049	4.370	.01640	.45130
1.049	6.690	.01570	.44080
1.049	-.180	.01500	.45270
	GRADIENT	.00001	-.00135

RUN NO. 6/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.110	-7.120	.01560	.47360
1.110	-4.810	.01540	.46800
1.110	-2.470	.01490	.46330
1.110	-.190	.01460	.46140
1.110	2.100	.01460	.45410
1.110	4.370	.01460	.45170
1.110	6.700	.01470	.44380
1.110	-.180	.01490	.46750
	GRADIENT	-.00008	-.00182

RUN NO. 7/ 0 RN/L = 6.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.160	-7.250	.01770	.49440
1.160	-4.890	.01740	.48830
1.160	-2.510	.01720	.48640
1.160	-.160	.01690	.48460
1.160	2.130	.01690	.48090
1.160	4.430	.01730	.48080
1.160	6.770	.01720	.47110
1.160	-.160	.01710	.48800
	GRADIENT	-.00002	-.00088

MSFC TWT 622 (1A125) LAUNCH VEHICLE. 77074TS+Z13 (R1N125) (9 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 975.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 37/ 0 RN/L = 6.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.249	-7.280	.01760	.48390
1.249	-4.900	.01670	.47920
1.249	-2.500	.01640	.47970
1.249	-.150	.01650	.48130
1.249	2.150	.01640	.47830
1.249	4.460	.01660	.47420
1.249	6.790	.01630	.47120
1.249	-.140	.01610	.47750
	GRADIENT	-.00001	-.00048

RUN NO. 42/ 0 RN/L = 6.61 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CA
1.463	-7.320	.01400	.45810
1.463	-4.930	.01330	.45200
1.463	-2.540	.01290	.45100
1.463	-.170	.01290	.44890
1.463	2.170	.01290	.44630
1.463	4.470	.01270	.44430
1.463	6.810	.01290	.44400
1.463	-.190	.01290	.44840
	GRADIENT	-.00005	-.00085

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN126) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 14/ 0 RN/L = 5.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
.804	-6.450	.01330	.29990
.804	-4.320	.01260	.29510
.804	-2.210	.01250	.29570
.804	-.100	.01210	.29180
.804	2.000	.01220	.29220
.804	4.100	.01270	.29450
.804	6.210	.01340	.29800
.804	-.100	.01200	.29140
	GRADIENT	-.00000	-.00022

RUN NO. 13/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
.902	-6.500	.01480	.34010
.902	-4.350	.01410	.33440
.902	-2.220	.01410	.33150
.902	-.100	.01290	.32380
.902	2.010	.01350	.33370
.902	4.140	.01360	.33370
.902	6.260	.01430	.33640
.902	-.100	.01340	.32540
	GRADIENT	-.00008	.00004

RUN NO. 11/ 0 RN/L = 6.42 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
.985	-6.540	.01580	.42440
.985	-4.400	.01510	.42040
.985	-2.220	.01510	.41940
.985	-.110	.01520	.41820
.985	2.020	.01560	.43520
.985	4.150	.01480	.41930
.985	6.300	.01590	.43340
.985	-.100	.01510	.41650
	GRADIENT	-.00000	.00064

MSFC TWT 622 (A125) LAUNCH VEH CLE, 77074TS+Z13 (R1N125) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO 107.1 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
1.044	-6.580	.01660	.46510
1.044	-4.400	.01650	.46620
1.044	-2.230	.01630	.46490
1.044	-.110	.01620	.46240
1.044	2.020	.01590	.46150
1.044	4.150	.01640	.46070
1.044	6.330	.01660	.45950
1.044	-.100	.01670	.46260
	GRADIENT	-.00003	-.00067

RUN NO 9.0 RN/L = 6.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
1.111	-6.620	.01660	.48480
1.111	-4.450	.01660	.48520
1.111	-2.260	.01630	.48300
1.111	-.110	.01640	.48000
1.111	2.030	.01660	.48200
1.111	4.180	.01690	.48220
1.111	6.360	.01710	.48340
1.111	-.100	.01640	.48020
	GRADIENT	.00003	-.0004

RUN NO. 8.0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
1.158	-6.660	.01760	.49770
1.158	-4.470	.01690	.49280
1.158	-2.280	.01650	.48970
1.158	-.110	.01660	.48400
1.158	2.040	.01660	.48570
1.158	4.210	.01730	.48990
1.158	6.400	.01770	.48750
1.158	-.100	.01650	.48390
	GRADIENT	.00004	-.00042

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN126) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 12/ 0 RN/L = 6.66 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
1.253	-6.680	.01700	.48590
1.253	-4.500	.01680	.48140
1.253	-2.270	.01650	.47830
1.253	-.100	.01620	.47530
1.253	2.060	.01630	.47880
1.253	4.240	.01680	.48130
1.253	6.440	.01710	.48300
1.253	-.100	.01630	.47620
	GRADIENT	-.00001	.00001

RUN NO. 43/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CA
1.459	-6.700	.01450	.45910
1.459	-4.490	.01400	.45620
1.459	-2.280	.01360	.45200
1.459	-.090	.01330	.45120
1.459	2.090	.01350	.45160
1.459	4.270	.01390	.45370
1.459	6.480	.01410	.45380
1.459	-.100	.01310	.44880
	GRADIENT	-.00001	-.00025

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS (RIN127) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN X*
LREF = 1290.3000 INCHES YMRP = .0000 IN Y*
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN Z*
SCALE = .0040

PARAMETRIC DATA

ALPHA = 10.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 816/ 0 RN/L = 4.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
2.990	-11.190	.00620	-.00639	.29860	-.12210	-.15960	10.73000
2.990	-9.110	.00607	-.00626	.28730	-.12510	-.15300	10.73000
2.990	-6.910	.00575	-.00592	.29580	-.12730	-.14660	10.73000
2.990	-4.730	.00562	-.00579	.28510	-.12850	-.14030	10.73000
2.990	-2.560	.00558	-.00575	.28260	-.12930	-.13330	10.73000
2.990	-.390	.00558	-.00575	.28180	-.12550	-.12920	10.72000
2.990	1.780	.00558	-.00575	.28410	-.12700	-.12950	10.72000
2.990	3.950	.00552	-.00569	.28310	-.13110	-.13770	10.73000
2.990	6.130	.00545	-.00562	.29660	-.09540	-.14700	10.74000
2.990	8.360	.00537	-.00553	.29860	-.09230	-.16330	10.74000
2.990	10.400	.00537	-.00526	.29200	-.09410	-.16380	10.74000
2.990	-.370	.00555	-.00582	.28[illegible]	-.12[illegible]30	-.[illegible]010	10.72000
	GRADIENT	-.00001	.00001	-.000[illegible]2	.00156	.0004	-.00046

RUN NO. 817/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.450	-10.780	.00255	-.00262	.23110	-.05240	-.09330	10.39000
4.450	-8.780	.00261	-.00269	.22700	-.05430	-.09220	10.39000
4.450	-6.650	.00265	-.00273	.22250	-.05520	-.09600	10.39000
4.450	-4.560	.00261	-.00269	.21780	-.05540	-.09630	10.39000
4.450	-2.470	.00268	-.00276	.21480	-.05560	-.09220	10.39000
4.450	-.360	.00265	-.00273	.21350	-.05630	-.08470	10.39000
4.450	1.710	.00271	-.00279	.21510	-.05720	-.08580	10.39000
4.450	3.800	.00271	-.00279	.21820	-.05520	-.09020	10.40000
4.450	5.920	.00271	-.00279	.22170	-.05130	-.09020	10.39000
4.450	8.040	.00271	-.00279	.22940	-.04760	-.09890	10.39000
4.450	10.030	.00281	-.00289	.23530	-.04760	-.10630	10.39000
4.450	-.330	.00274	-.00283	.21450	-.05260	-.08510	10.38000
	GRADIENT	.00001	-.00001	.00005	-.00006	-.00059	.00095

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS (R1N127) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 10.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 818/ 0 RN/L = 5.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.959	-10.670	.00189	-.00195	.22410	-.03890	-.08110	10.32000
4.959	-8.680	.0 93	-.00199	.21950	-.04060	-.08140	10.32000
4.959	-6.600	.00199	-.00205	.21490	-.04220	-.07720	10.32000
4.959	-4.520	.00199	-.00205	.21080	-.04290	-.07580	10.32000
4.959	-2.450	.00206	-.00212	.20750	-.04340	-.07080	10.31000
4 959	-.350	.00206	-.00212	.20710	-.04390	-.07820	10.31000
4.959	1.700	.00209	-.00215	.20830	-.04470	-.07720	10.31000
4.959	3.770	.00209	-.00215	.21130	-.04370	-.07740	10.31000
4.959	5.890	.00206	-.00212	.21520	-.04040	-.07940	10.31000
4.959	7.980	.00209	-.00215	.22240	-.03810	-.08930	10.31000
4.959	9.950	.00216	-.00222	.22860	-.03790	-.09710	10.31000
4.959	-.350	.00216	-.00222	.20790	-.04070	-.07670	10.31000
	GRADIENT	00001	-.00001	00009	-.00014	-.00046	-.00097

MSFC TWT 622 (A125 LAUNCH VEHICLE, 74075 (RUN128) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN XT
LREF = 1290.3000 INCHES YMRP = .0000 IN YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 20.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 8147.0 RN/L = 4.55 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
2.990	-11.150	.00532	-.00549	.26560	-.11.860	-.35550	21.88000
2.090	-9.060	.00519	-.00535	.25970	-.12010	-.34990	21.89000
2.990	-6.850	.00516	-.00532	.25590	-.12300	-.33970	21.87000
2.990	-4.700	.00519	-.00535	.25590	-.12360	-.33950	21.86000
2.990	-2.540	.00513	-.00528	.25590	-.12280	-.33650	21.86000
2.990	-.380	.00483	-.00498	.25960	-.11870	-.32380	2.86000
2.990	1.780	.00483	-.00499	.26020	-.11670	-.32460	2.86000
2.990	3.960	.00503	-.00519	.25640	-.11540	-.33500	21.87000
2.990	6.160	.00506	-.00522	.25520	-.11440	-.34330	21.89000
2.990	8.370	.00513	-.00528	.26000	-.10950	-.35590	21.89000
2.990	10.420	.00536	-.00552	.26660	-.10810	-.36440	2.88000
2.990	-.330	.00490	-.00505	.26130	-.11730	-.32330	2.85000
	GRADIENT	-.00003	.00003	.00030	.00095	-.00[illegible]	.00139

RUN NO. 8137.0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.450	-10.740	.00229	-.00236	.22640	-.05020	-.29140	21.04000
4.450	-8.740	.00232	-.00239	.22020	-.05200	-.28030	21.03000
4.450	-6.640	.00229	-.00236	.21570	-.05300	-.27820	2.04000
4.450	-4.520	.00219	-.00225	2.220	-.05350	-.27560	21.04000
4.450	-2.450	.00229	-.00236	.20950	-.05350	-.27530	21.04000
4.450	-.360	.00225	-.00232	.20930	-.05280	-.27570	2.05000
4.450	1.730	.00212	-.00219	2.030	-.05200	-.27840	21.05000
4.450	3.820	.00215	-.00222	.21200	-.05260	-.28160	21.05000
4.450	5.920	.00229	-.00236	.21500	-.05330	-.28550	21.04000
4.450	8.040	.00235	-.00242	.21950	-.05220	-.29460	21.05000
4.450	10.020	.00245	-.00252	.22790	-.05110	-.30540	21.05000
4.450	-.360	.00229	-.00236	.21450	-.05150	-.28430	2.05000
	GRADIENT	-.00001	.00001	.00002	.00016	-.00058	.00144

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 7407S (R1N128) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 20.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 815/ 0 XW/L = 5.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.959	-10.660	.00160	-.00165	.22310	-.03630	-.28140	20.86000
4.959	-8.670	.00163	-.00168	.21650	-.03790	-.27080	20.86000
4.959	-6.590	.00163	-.00168	.21270	-.03910	-.26890	20.66000
4.959	-4.510	.00160	-.00165	.20840	-.03960	-.26590	20.87000
4.959	-2.430	.00160	-.00165	.20460	-.04040	-.26560	20.87000
4.959	-.360	.00163	-.00168	.20300	-.04040	-.27010	20.87000
4.959	1.710	.00157	-.00162	.20540	-.04040	-.27290	20.87000
4.959	3.780	.00160	-.00165	.20860	-.04070	-.27540	20.87000
4.959	5.890	.00170	-.00175	.21020	-.04170	-.27770	20.86000
4.959	7.990	.00176	-.00182	.21520	-.04120	-.28570	20.86000
4.959	9.960	.00183	-.00188	.22030	-.04090	-.29730	20.86000
4.959	-.360	.00176	-.00182	.20420	-.04120	-.26980	20.87000
	GRADIENT	-.00000	.00000	.00006	-.00011	-.00126	.00000

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 240TS (R1N120) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1293.3000 INCHES YMRP = .0000 IN. YT
BREF = 1293.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO 8217 0 RN/L = 4.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
2.990	-11.280	.00578	-.00596	.31660	-.13590	.05290	-.28000
2.990	-9.170	.00542	-.00559	.31170	-.13700	.05300	-.27000
2.990	-5.960	.00526	-.00542	.30770	-.13640	.05370	-.27000
2.990	-4.760	.00542	-.00559	.30720	-.13550	.05500	-.27000
2.990	-2.590	.00545	-.00562	.30590	-.13300	.05760	-.27000
2.990	-.390	.00555	-.00572	.30660	-.13000	.05940	-.28000
2.990	1.770	.00559	-.00575	.30700	-.11950	.05730	-.28000
2.990	3.950	.00558	-.00575	.30910	-.11330	.05700	-.28000
2.990	6.130	.00552	-.00569	.31240	-.10390	.05380	-.29000
2.990	8.410	.00559	-.00575	.31580	-.10080	.05290	-.29000
2.990	10.500	.00571	-.00589	.32090	-.09760	.05360	-.30000
2.990	-.380	.00559	-.00575	.30700	-.12460	.05740	-.28000
	GRADIENT	.00002	-.00002	.00022	.00266	.00017	-.00138

RUN NO 8207 0 RN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.450	-10.820	.00268	-.00276	.25020	-.05720	.05570	-.14000
4.450	-8.820	.00261	-.00269	.25390	-.05950	.05300	-.14000
4.450	-6.710	.00258	-.00265	.24940	-.05990	.05200	-.14000
4.450	-4.600	.00251	-.00259	.24800	-.06060	.05400	-.14000
4.450	-2.490	.00251	-.00259	.24150	-.06060	.05290	-.14000
4.450	-.390	.00255	-.00262	.24250	-.06110	.05510	-.15000
4.450	1.710	.00258	-.00265	.24310	-.06067	.05510	-.15000
4.450	3.810	.00261	-.00269	.24760	-.05910	.05070	-.15000
4.450	5.950	.00271	-.00279	.25010	-.05550	.05000	-.16000
4.450	8.090	.00265	-.00273	.25730	-.05260	.04590	-.16000
4.450	10.050	.00269	-.00276	.25410	-.05110	.04910	-.17000
4.450	-.390	.00265	-.00273	.24310	-.05540	.05470	-.15000
	GRADIENT	.00001	-.00001	.00004	.00014	-.00021	-.00190

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS (R1N129) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 819/ 0 RN/L = 5.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.959	-10.710	.00193	-.00199	.25410	-.04220	.05980	-.12000
4.959	-8.730	.00196	-.00202	.24630	-.04370	.05530	-.12000
4.959	-6.620	.00196	-.00202	.24280	-.04470	.05360	-.12000
4.959	-4.530	.00193	-.00199	.23870	-.04570	.05320	-.12000
4.959	-2.470	.00193	-.00199	.23460	-.04650	.05340	-.12000
4.959	-.380	.00196	-.00202	.23430	-.04720	.05430	-.13000
4.959	1.700	.00199	-.00205	.23530	-.04750	.05220	-.13000
4.959	3.790	.00202	-.00209	.23760	-.04650	.04840	-.13000
4.959	5.900	.00206	-.00212	.24330	-.04490	.05150	-.13000
4.959	8.010	.00206	-.00212	.24990	-.04220	.04840	-.14000
4.959	9.970	.00209	-.00215	.25750	-.04040	.04990	-.14000
4.959	-.380	.00209	-.00215	.23210	-.04370	.05300	-.13000
	GRADIENT	.00001	-.00001	-.00007	-.00012	-.00052	-.00144

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+PLUME (R1N130) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 8007 RN/L = 5.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.450	-10.840	-.00398	.00411	.22370	-.03160	.06190	-.15000
4.450	-8.820	-.00398	.00411	.21840	-.03120	.05570	-.14000
4.450	-6.690	-.00271	.00279	.21880	-.03330	.05400	-.15000
4.450	-4.590	-.00153	.00158	.21950	-.03680	.05010	-.14000
4.450	-2.490	-.00101	.00104	.21580	-.04030	.05240	-.15000
4.450	-.390	-.00144	.00149	.21500	-.04260	.05030	-.15000
4.450	1.720	-.00176	.00182	.21610	-.03990	.05090	-.15000
4.450	3.620	-.00245	.00252	.21870	-.02830	.04830	-.15000
4.450	5.950	-.00300	.00310	.22190	-.02150	.04780	-.15000
4.450	8.080	-.00431	.00444	.22610	-.01230	.05130	-.16000
4.450	10.070	-.00547	.00555	.23900	-.00500	.05550	-.17000
4.450	-.380	-.00185	.00192	.22000	-.03030	.05020	-.15000
	GRADIENT	-.00012	.00013	-.00006	.00083	-.00024	-.00095

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS+PLUME (RIN!3I) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 10.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 801/ 0 RN/L = 5.03 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.450	-10.760	.00000	.00000	.20600	-.00710	-.08450	10.39000
4.450	-8.760	-.00003	.00003	.20150	-.01530	-.08850	10.39000
4.450	-6.650	-.00026	.00027	.19750	-.02720	-.08450	10.39000
4.450	-4.550	-.00049	.00050	.19080	-.03180	-.08860	10.39000
4.450	-2.460	-.00072	.00074	.18520	-.03050	-.08340	10.39000
4.450	-.350	-.00078	.00081	.18370	-.03030	-.08220	10.38000
4.450	1.710	-.00140	.00145	.18470	-.02010	-.08570	10.39000
4.450	3.810	-.00140	.00145	.18890	-.01100	-.08990	10.39000
4.450	5.900	-.00108	.00111	.19540	-.00280	-.09050	10.38000
4.450	8.030	-.00124	.00128	.20320	-.01100	-.09450	10.38000
4.450	10.010	-.00163	.00168	.21050	-.01450	-.10110	10.38000
4.450	-.370	-.00085	.00087	.18380	-.02620	-.08430	10.38000
	GRADIENT	-.00012	.00012	-.00021	.00249	-.00028	-.00000

MSFC TWT 622 (1A125) LAUNCH VEHICLE, TWOTS+PLUME (R1N132) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 20.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 8027 0 RN/L = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.450	-10.740	-.00059	.00051	.20640	.01450	-.27690	21.04000
4.450	-8.740	-.00049	.00050	.19710	.00820	-.27020	21.04000
4.450	-5.640	-.00091	.00094	.18800	.01020	-.26190	21.04000
4.450	-4.550	-.00114	.00119	.18370	.00990	-.25740	21.04000
4.450	-2.450	-.00098	.00101	.17980	.00650	-.25870	21.04000
4.450	-.360	-.00088	.00091	.17970	-.00080	-.25600	21.05000
4.450	.730	-.00069	.00071	.18000	-.00900	-.26310	21.05000
4.450	3.830	-.00079	.00081	.19300	-.01650	-.26600	21.05000
4.450	5.910	-.00053	.00061	.18630	-.02100	-.26950	21.04000
4.450	8.040	-.00046	.00047	.19470	-.02510	-.27990	21.04000
4.450	10.020	.00000	.00000	.20670	-.02890	-.29090	21.05000
4.450	-.360	-.00072	.00074	.18000	-.00800	-.26600	21.05000
	GRADIENT	.00005	-.00003	-.00003	-.00327	-.00103	.00143

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740T (R1N133) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 808/ 0 RN/L = 5.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.450	-10.790	.00287	-.00296	.19950	.00000	.02390	-.10000
4.450	-8.800	.00291	-.00300	.19540	.00000	.02770	-.10000
4.450	-6.670	.00291	-.00300	.19110	.00000	.03130	-.10000
4.450	-4.580	.00287	-.00295	.18740	.00000	.03680	-.10000
4.450	-2.480	.00284	-.00293	.18290	.00000	.03990	-.10000
4.450	-.380	.00281	-.00289	.17990	.00000	.03750	-.10000
4.450	1.720	.00281	-.00289	.18240	.00000	.03780	-.10000
4.450	3.820	.00281	-.00289	.18650	.00000	.03650	-.10000
4.450	5.930	.00281	-.00289	.18980	.00000	.03230	-.10000
4.450	8.050	.00284	-.00293	.19560	.00000	.02820	-.10000
4.450	10.050	.00291	-.00300	.20130	.00000	.02540	-.11000
4.450	-.380	.00297	-.00295	.18250	.00000	.03550	-.10000
	GRADIENT	-.00001	.00001	-.00011	.00000	-.00013	-.00000

MSFC TWT 622 (IA125 LAUNCH VEHICLE, 740T (RIN134) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 10.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 809/ 0 PN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.450	-10.760	.00274	-.00283	.16180	.00000	-.06730	10.26000
4.450	-8.760	.00281	-.00289	.15970	.00000	-.06470	10.25000
4.450	-6.560	.00281	-.00289	.15780	.00000	-.06590	10.24000
4.450	-4.560	.00284	-.00293	.15590	.00000	-.06260	10.23000
4.450	-2.460	.00291	-.00300	.15610	.00000	-.04840	10.22000
4.450	-.370	.00281	-.00289	.15820	.00000	-.04720	10.22000
4.450	1.770	.00284	-.00293	.15790	.00000	-.04700	10.22000
4.450	3.810	.00287	-.00296	.15820	.00000	-.06020	10.22000
4.450	5.910	.00287	-.00296	.15610	.00000	-.06560	10.22000
4.450	8.030	.00291	-.00300	.15800	.00000	-.06550	10.23000
4.450	10.010	.00294	-.00303	.15690	.00000	-.07030	10.23000
4.450	-.370	.00281	-.00300	.15750	.00000	-.04670	10.22000
	GRADIENT	.00000	-.00000	.00032	.00000	.00030	-.00096

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740T (R1N135) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 20.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 810/ 0 RN/L = 5.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.450	-10.770	.00235	-.00242	.14430	.00000	-.17800	20.64000
4.450	-8.760	.00242	-.00249	.14020	.00000	-.16920	20.63000
4.450	-6.660	.00251	-.00259	.13620	.00000	-.15550	20.61000
4.450	-4.540	.00251	-.00259	.13480	.00000	-.15040	20.60000
4.450	-2.460	.00255	-.00262	.13310	.00000	-.14300	20.59000
4.450	-.350	.00261	-.00269	.13480	.00000	-.14300	20.59000
4.450	1.720	.00268	-.00276	.13450	.00000	-.14620	20.60000
4.450	3.810	.00274	-.00283	.13590	.00000	-.15470	20.60000
4.450	5.940	.00271	-.00279	.13650	.00000	-.16360	20.61000
4.450	8.050	.00268	-.00276	.13850	.00000	-.17580	20.63000
4.450	10.030	.00261	-.00269	.14220	.00000	-.18920	20.65000
4.450	-.370	.00265	-.00273	.13550	.00000	-.14270	20.59000
	GRADIENT	.00003	-.00003	.00017	.00000	-.00056	.00048

MSFC TWT 622 (A125) LAUNCH VEHICLE, TWOT+PLUME (PRN136 (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = 0040

PARAMETRIC DATA

ALPHA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO 8074.0 RNYL = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.450	-10.830	-.00333	.00343	.16810	.00000	.02720	-.10000
4.450	-8.610	-.00274	.00283	.16680	.00000	.03220	-.10000
4.450	-6.700	-.00225	.00272	.16510	.00000	.03000	-.10000
4.450	-4.590	-.00188	.00192	.16240	.00000	.03330	-.10000
4.450	-2.490	-.00127	.00131	.15790	.00000	.03210	-.10000
4.450	-.360	-.00096	.00098	.15270	.00000	.02750	-.10000
4.450	1.720	-.00153	.00158	.15650	.00000	.03260	-.10000
4.450	3.820	-.00266	.00273	.16140	.00000	.03350	-.10000
4.450	5.920	-.00310	.00320	.16440	.00000	.02860	-.10000
4.450	8.080	-.00430	.00444	.16850	.00000	.02580	-.10000
4.450	10.060	-.00559	.00579	.17310	.00000	.02640	-.11000
4.450	-.390	-.00144	.00149	.15670	.00000	.02830	-.10000
	GRADIENT	-.00009	.00009	-.00016	.00000	-.00005	.00000

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740T+PLUME (RIN137) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400 0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 10.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO 806/ 0 RN/L = 5.03 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.450	-10.770	-.00026	.00027	.14140	.00000	-.06220	10.25000
4.450	-8.760	- 00042	.00044	.13640	.00000	-.05630	10.24000
4.450	-6.660	-.00095	.00098	.13300	.00000	-.05340	10.23000
4.450	-4.560	-.00088	.00091	.12950	.00000	-.05050	10 23000
4 450	-2.460	-.00065	.00067	.12940	.00000	-.04720	10.22000
4.450	-.370	-.00020	.00020	.12940	.00000	-.04730	10.22000
4.450	1.710	-.00072	.00074	.12930	.00000	-.04820	10.22000
4 450	3.810	-.00144	.00148	.13100	.00000	-.05320	10 23000
4.450	5.900	- 00209	.00215	.13290	.00000	-.05610	10.23000
4.450	8.030	-.00052	.00054	.13840	.00000	-.06250	10.24000
4.450	10.010	-.00121	.00125	.14400	.00000	-.07100	10.25000
4.450	-.350	-.00020	.00020	.13110	.00000	-.04670	10.22000
	GRADIENT	-.00006	.00006	.00014	.00000	-.00031	-.00000

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 740T+PLUME (R:N139) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

ALPHA = 20.000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 805/ 0 RN/L = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	ALPHA
4.450	-10.760	-.00020	.00020	.12680	.00000	-.16770	20.64000
4.450	-8.760	-.00003	.00003	.12260	.00000	-.15840	20.62000
4.450	-6.650	-.00003	.00003	.11670	.00000	-.15030	20.61000
4.450	-4.550	-.00010	.00010	.11180	.00000	-.14300	20.60000
4.450	-2.460	-.00056	.00057	.10480	.00000	-.13610	20.59000
4.450	-.370	-.00003	.00003	.10360	.00000	-.13780	20.59000
4.450	1.720	.000 6	-.00017	.10520	.00000	-.13760	20.59000
4.450	3.810	-.00013	.000 3	.10980	.00000	-.14710	20.60000
4.450	5.920	-.00036	.00037	.11370	.00000	-.15600	20.61000
4.450	8.050	-.00029	.00030	.12150	.00000	-.16820	20.62000
4.450	10.030	-.00003	.00003	.12670	.00000	-.18090	20.64000
4.450	-.370	.00003	-.00003	.10590	.00000	-.14070	20.60000
GRADIENT		.00003	-.00003	-.00087	.00000	-.00046	-.00000

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740T+PLUME (R1N139) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 804/ 0 RN/L = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	BETA
4.450	10.580	-.00026	.00027	.13120	.00000	-.03790	.00000
4.450	12.550	-.00036	.00037	.12710	.00000	-.05860	.00000
4.450	14.620	-.00056	.00057	.12060	.00000	-.07580	.01000
4.450	16.700	-.00056	.00057	.11570	.00000	-.09650	.00000
4.450	18.770	-.00042	.00044	.11100	.00000	-.10970	.00000
4.450	20.850	.00000	.00000	.10550	.00000	-.13480	.00000
4.450	22.910	.00072	-.00074	.09720	.00000	-.15480	.01000
4.450	25.000	.00082	-.00084	.09420	.00000	-.19650	.01000
4.450	27.110	.00088	-.00091	.08950	.00000	-.23990	.02000
4.450	29.230	.00091	-.00094	.08580	.00000	-.28230	.02000
4.450	31.210	.00062	-.00064	.08270	.00000	-.32480	.02000
4.450	20.870	.00029	-.00030	.10470	.00000	-.13860	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS (RIN140) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 803/ 0 RN/L = 5.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	BETA
4.450	10.740	-.00091	.00094	.18470	-.03090	-.06700	.00000
4.450	12.760	-.00101	.00104	.19180	-.02380	-.10570	.00000
4.450	14.880	-.00121	.00125	.17880	-.01940	-.14300	.00000
4.450	17.010	-.00124	.00129	.17790	-.01080	-.17410	.00000
4.450	19.130	-.00118	.00121	.17510	-.00060	-.21270	.00000
4.450	21.310	-.00078	.00081	.17790	-.00360	-.25610	.01000
4.450	23.440	-.00062	.00064	.18130	-.00340	-.29060	.01000
4.450	25.600	-.00039	.00040	.8280	.00080	-.34450	.02000
4.450	27.770	.00000	.00000	.19820	.00300	-.40180	.02000
4.450	29.970	.00035	-.00037	.19450	.00470	-.46430	.02000
4.450	32.030	.00072	-.00074	.196 0	.00800	-.52610	.03000
4.450	2..340	-.00078	.00081	.17890	-.00360	-.25130	.01000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740TS (R'N141) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 812/ 0 RN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	BETA
4.450	10.750	.00251	-.00259	.21330	-.05370	-.07360	.00000
4.450	12.760	.00251	-.00259	.21180	-.05430	-.10680	.00000
4.450	14.890	.00245	-.00252	.21330	-.05590	-.14490	.00000
4.450	17.010	.00242	-.00249	.21070	-.05530	-.18070	.00000
4.450	19.140	.00229	-.00236	.20860	-.05480	-.22000	.00000
4.450	21.290	.00225	-.00232	.20810	-.05350	-.26300	.01000
4.450	23.460	.00225	-.00232	.20910	-.05200	-.31650	.01000
4.450	25.620	.00229	-.00236	.21030	-.04980	-.37230	.02000
4.450	27.820	.00225	-.00232	.21230	-.04580	-.43210	.02000
4.450	30.020	.00219	-.00225	.21610	-.04590	-.49690	.03000
4.450	32.080	.00222	-.00229	.22030	-.04350	-.56130	.03000
4.450	21.200	.00222	-.00229	.20820	-.04830	-.25570	.01000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 740T (RIN142) (29 JUL 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.3000 INCHES YMRP = .0000 IN. YT
BREF = 1290.3000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = 00.0

PARAMETRIC DATA

BETA = .000 ELV-IL = .000
ELV-OL = .000 ELV-IR = .000
ELV-OR = .000

RUN NO. 811/ 0 RN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CLMBF	CA	ELV-IL	ELV-OL	BETA
4.450	10.590	.00268	-.00276	.15750	.00000	-.04110	.00000
4.450	12.550	.00271	-.00279	.15290	.00000	-.06040	.00000
4.450	14.620	.00274	-.00293	.14610	.00000	-.07990	.00000
4.450	16.700	.00274	-.00293	.14290	.00000	-.10020	.00000
4.450	18.770	.00274	.00283	.13560	.00000	-.11800	.00000
4.450	20.880	.00271	-.00279	.13390	.00000	-.14110	.00000
4.450	22.930	.00268	-.00286	.13120	.00000	-.15920	.00000
4.450	25.020	.00267	-.00287	.12550	.00000	-.19730	.01000
4.450	27.140	.00266	-.00286	.12290	.00000	-.23500	.01000
4.450	29.250	.00266	-.00273	.12000	.00000	-.27150	.01000
4.450	31.240	.00266	-.00278	.11900	.00000	-.31590	.01000
4.450	33.880	.00268	-.00276	.13340	.00000	-.14270	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000

MSFC TWT 622 (A125) LAUNCH VEHICLE, 770741S+Z13 (RIN221) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = 0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 15/ 0 RN/L = 5.93 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
.798	-6.900	-.09890	-.0192	-.00620
.798	-4.720	-.07290	-.01410	-.00230
.798	-2.480	-.04540	-.00990	.00350
.798	-.270	-.01330	-.00300	.00940
.798	1.930	.01850	.00290	.01590
.798	4.180	.05010	.00890	.02230
.799	5.420	.08110	.01490	.02780
.799	-.270	-.00770	-.00210	.01020
	GRADIENT	.01396	.00261	.00277

MSFC TWT 622 (IA125 LAUNCH VEHICLE, 77074TS+Z13 (R1N221) (19 JUN 75)

REFERENCE DATA

SREF 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 289.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 16/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
.897	-7.020	-.08850	-.01730	-.00750
.897	-4.740	-.05680	-.01120	-.00180
.897	-2.510	-.02910	-.00600	.00410
.897	-.270	.00550	.00060	.01060
.897	1.960	.04100	.00730	.01670
.897	4.200	.07740	.01450	.02330
.897	6.510	.10450	.01930	.02830
.897	-.270	.00830	.00100	.01060
	GRADIENT	.01515	.00289	.00281

RUN NO. 18/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
.996	-7.060	-.09590	-.01740	-.00630
.996	-4.750	-.06160	-.01100	-.00070
.996	-2.450	-.02660	-.00480	.00530
.996	-.200	.00940	.00180	.01130
.996	2.050	.05070	.00970	.01680
.996	4.310	.09010	.01750	.02210
.996	6.610	.12750	.02480	.02650
.996	-.210	.01120	.00200	.01110
	GRADIENT	.01683	.00316	.00252

RUN NO. 19/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 3.00

MACH	ALPHA	CNW	CBW	CTW
1.049	-7.080	-.09970	-.01760	-.00580
1.049	-4.760	-.06450	-.01100	.00010
1.049	-2.450	-.03050	-.00490	.00600
1.049	-.180	.00890	.00210	.01180
1.049	2.110	.05030	.01000	.01740
1.049	4.360	.09180	.01810	.02250
1.049	6.690	.12910	.02550	.02580
1.049	-.180	.01160	.00250	.01220
	GRADIENT	.01725	.00321	.00247

MSFC TWT 622 (1A125 LAUNCH VEHICLE, 7707+TS+2 3 (P1N22) 9 JAN 75

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

BETA = .000 GRBINC = .000
SPOILR = 20.000

RUN NO 20/ 0 PN/L = 6.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
.03	-7.150	-.01130	-.01750	-.00450
.03	-4.810	-.05220	-.01030	.00120
.03	-2.470	-.02860	-.00320	.00730
.03	-.130	.01740	.00400	.01270
.03	2.210	.06010	.00880	.01750
.03	4.530	.09990	.02000	.02150
.03	6.790	.13560	.02700	.02440
.03	-.130	.01330	.00430	.01300
	GRADIENT	.01769	.0033	.00222

RUN NO. 21/ 0 PN/L = 6.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
.045	-7.250	-.10240	-.01800	-.00330
.045	-4.850	-.05990	-.00990	.00170
.045	-2.450	-.02600	-.00200	.00810
.045	-.040	.02870	.00850	.01370
.045	2.340	.07130	.01450	.01770
.045	4.740	.10970	.02190	.02190
.045	6.750	.14360	.02870	.02530
.045	-.040	.03170	.00550	.01350
	GRADIENT	.01837	.00345	.00216

RUN NO. 17/ 0 PN/L = 6.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
.252	-7.310	-.08240	-.01500	-.00140
.252	-4.900	-.03520	-.00610	.00230
.252	-2.510	.01090	.00280	.00690
.252	-.140	.05400	.01100	.01170
.252	2.240	.09230	.01820	.01680
.252	4.670	.12640	.02460	.02080
.252	6.790	.15690	.03050	.02460
.252	-.140	.05710	.01150	.01160
	GRADIENT	.01739	.00328	.00200

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (R1N221) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 41/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
1.459	-7.340	-.06460	-.01210	-.00420
1.459	-4.940	-.02620	-.00480	-.00260
1.459	-2.530	.01420	.00290	.00030
1.459	-.170	.05720	.01090	.00440
1.459	2.180	.09570	.01800	.00940
1.459	4.470	.12810	.02390	.01470
1.459	6.800	.15620	.02910	.01840
1.459	-.180	.05730	.01090	.00420
	GRADIENT	.01658	.00309	.00186

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (R1N222) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 39/ 0 RN/L = 6.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
.798	-6.910	-.13450	-.02580	-.00890
.798	-4.720	-.10660	-.02050	-.00300
.798	-2.480	-.07990	-.01520	.00250
.798	-.290	-.04680	-.00930	.00870
.798	1.910	-.01570	-.00330	.01420
.798	4.170	.01230	.00180	.02070
.798	6.390	.04500	.00810	.02630
.798	-.290	-.04870	-.00950	.00840
	GRADIENT	.01357	.00255	.00267

MSFC TWT 622 (A 25) LAUNCH VEHICLE, 770747S+Z13 (PIN222) / 19 JUN 75

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 1307.0000 IN XO
LREF = 474.9000 INCHES YMRP = 105.0000 IN YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN ZO
SCALE = .0040

PARAMETRIC DATA

BETA = .000 DPBINC = .000
SPOILR = 40.000

RUN NO. 36/ 0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
.902	-7.030	-.12230	-.02330	-.00810
.902	-4.760	-.08690	-.01680	-.00280
.903	-2.530	-.05940	-.01170	.00290
.902	-.290	-.03050	-.00600	.00960
.902	1.920	.00430	.00050	.01590
.902	4.190	.03590	.00650	.02220
.902	6.480	.06910	.01270	.02700
.902	-.290	-.02530	-.00500	.00910
	GRADIENT	.01384	.00263	.00886

RUN NO. 37/ 0 RN/L = 5.61 GRADIENT INTERVAL = -5.00 5.00

MACH	ALPHA	CNW	CBW	CTW
.995	-7.110	-.11790	-.02130	-.00830
.995	-4.790	-.08430	-.01490	-.00240
.995	-2.490	-.05290	-.00930	.0320
.995	-.250	-.02120	-.00360	.00900
.995	2.010	.01480	.00330	.0551
.995	4.270	.05170	.01010	.02120
.995	6.600	.09320	.01820	.02510
.995	-.250	-.02040	-.00350	.00910
	GRADIENT	.01502	.00276	.00253

RUN NO 36/ 0 RN/L = 6.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
1.047	-7.140	-.11910	-.02090	-.00890
1.047	-4.810	-.08270	-.01420	-.00250
1.047	-2.480	-.05100	-.00840	.00340
1.047	-.220	-.01740	-.00250	.0190
1.047	2.070	.01930	.00430	.01530
1.047	4.350	.06270	.01240	.02110
1.047	6.660	.10150	.01990	.02470
1.047	-.220	-.01720	-.00240	.00950
	GRADIENT	.01579	.00288	.00259

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (R1N222) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 33/ 0 RN/L = 6.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
1.100	-7.160	-.11830	-.02070	-.00800
1.100	-4.820	-.07910	-.01330	-.00220
1.100	-2.480	-.04160	-.00660	.00310
1.100	-.200	-.00260	.00020	.00890
1.100	2.070	.03690	.00750	.01480
1.100	4.360	.07680	.01520	.01930
1.100	6.710	.11650	.02290	.02240
1.100	-.200	-.00170	.00030	.00910
	GRADIENT	.01703	.00311	.00239

RUN NO. 34/ 0 RN/L = 6.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	LPHA	CNW	CBW	CTW
1.151	-7.260	-.11250	-.01980	-.00730
1.151	-4.880	-.07170	-.01210	-.00210
1.151	-2.480	-.02890	-.00440	.00390
1.151	-.160	.01640	.00370	.01030
1.151	2.130	.05930	.01190	.01470
1.151	4.440	.09760	.01920	.01900
1.151	6.760	.13250	.02590	.02300
1.151	-.160	.01860	.00420	.01030
	GRADIENT	.01836	.00339	.00228

RUN NO. 35/ 0 RN/L = 6.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
1.252	-7.290	-.09150	-.01670	-.00380
1.252	-4.880	-.04380	-.00760	.00020
1.252	-2.480	.00270	.00100	.00520
1.252	-.130	.04730	.00930	.01020
1.252	2.160	.08440	.01620	.01500
1.252	4.470	.11750	.02240	.01960
1.252	6.810	.14710	.02820	.02330
1.252	-.130	.04860	.00960	.01030
	GRADIENT	.01733	.00322	.00206

MSFC TWT 622 IA125 LAUNCH VEHICLE, 77074TS+Z13 (RIN222) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 40/ 1 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
1.460	-7.330	-.07680	-.01440	-.00580
1.460	-4.930	-.03750	-.00700	-.00390
1.460	-2.530	.00450	.00080	-.00090
1.460	-.130	.04750	.00980	.00300
1.460	2.190	.08730	.01610	.00830
1.460	4.460	.11930	.02190	.01340
1.460	5.890	.14710	.02730	.01750
1.460	-.180	.04750	.00980	.00300
	GRADIENT	.01698	.00311	.00185

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (F[illegible]223) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO. 27/ 0 RN/L = 6.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
.795	-6.440	-.01380	-.00290	.00680
.795	-4.320	-.01160	-.00280	.00800
.795	-2.190	-.01010	-.00260	.00900
.795	-.100	-.01070	-.00250	.00980
.795	2.010	-.00900	-.00190	.01070
.795	4.110	-.00510	-.00120	.01150
.795	6.210	-.00020	-.00010	.01340
.795	-.100	-.01160	-.00270	.00950
	GRADIENT	.00072	.00019	.00041

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (R'223) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 SRBINC = .000
SPOILR = 20.000

RUN NO. 26/ 0 RN/L = 6.36 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
.904	-6.540	-.01110	-.00260	.00810
.904	-4.390	-.00280	-.00120	.00890
.904	-2.230	.00140	-.00040	.00950
.904	-.100	.00460	.00050	.01050
.904	2.020	.01440	.00220	.01210
.904	4.150	.02180	.00380	.01300
.904	6.280	.03060	.00560	.01440
.904	-.100	.00600	.00070	.01030
	GRADIENT	.00291	.00059	.00051

RUN NO. 24/ 0 RN/L = 5.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
.997	-6.540	-.01080	-.00210	.00840
.997	-4.400	-.00150	-.00060	.00840
.997	-2.230	.00460	.00050	.00940
.997	-.100	.00920	.00160	.01080
.997	2.030	.01910	.00330	.01140
.997	4.150	.02810	.00520	.01260
.997	6.300	.03740	.00700	.01370
.997	-.100	.00910	.00160	.01060
	GRADIENT	.00345	.00067	.00049

RUN NO. 23/ 0 RN/L = 6.64 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
1.049	-6.570	-.01620	-.00250	.00850
1.049	-4.420	-.00830	-.00110	.00890
1.049	-2.250	-.00010	.00030	.01020
1.049	-.110	.00690	.00170	.01150
1.049	2.030	.01770	.00370	.01260
1.049	4.170	.02710	.00540	.01370
1.049	6.330	.03950	.00790	.01550
1.049	-.110	.00680	.00170	.01140
	GRADIENT	.00413	.00076	.00055

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (R1N223) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN YO
BREF = 936.7000 INCHES ZMRP = 289.0000 IN ZO
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 20.000

RUN NO 22/ 0 RN/L = 5.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
1.105	-6.620	-.01200	-.00130	.00990
1.105	-4.450	-.00220	.00020	.01080
1.105	-2.260	.00790	.00210	.01170
1.105	-.110	.01780	.00400	.01290
1.105	2.040	.02850	.00610	.01390
1.105	4.190	.04250	.00880	.01510
1.105	6.360	.05870	.01190	.01640
1.105	-.110	.02000	.00440	.01300
	GRADIENT	.00510	.00098	.00050

RUN NO. 25/ 0 RN/L = 5.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
1.249	-6.700	.01430	.00360	.01190
1.249	-4.490	.02710	.00600	.01160
1.249	-2.290	.03870	.00880	.01060
1.249	-.090	.05240	.01070	.01140
1.249	2.050	.06050	.01230	.01110
1.249	4.240	.06940	.01390	.01070
1.249	6.440	.07880	.01540	.01010
1.249	-.110	.05350	.01080	.01090
	GRADIENT	.00488	.00091	-.00007

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (R1N224) (19 JUN 75)

REFERENCE DATA

SREF = 2690 0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936 7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO. 28/ 0 RN/L = 6.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
.802	-6.450	-.04670	-.00930	.00570
.802	-4.350	-.04610	-.00940	.00700
.802	-2.200	-.04340	-.00890	.00820
.802	-.100	-.04400	-.00890	.00890
.802	2.010	-.04120	-.00820	.00970
.802	4.110	-.03670	-.00730	.01040
.802	6.220	-.03220	-.00620	.01200
.802	-.110	-.04380	-.00880	.00880
	GRADIENT	.00099	.00023	.00039

RUN NO. 29/ 0 RN/L = 6.35 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
.898	-5.510	-.04440	-.00900	.00770
.898	-4.360	-.03900	-.00800	.00830
.898	-2 230	-.03120	-.00650	.00870
.898	-.100	-.02840	-.00570	.00960
.899	2.020	-.02130	-.00440	.01060
.898	4.150	-.01560	-.00320	.01170
898	6.280	-.01100	-.00200	.01340
.898	-.100	-.02900	-.00580	.00920
	GRADIENT	.00267	.00055	.00041

RUN NO. 31/ 0 RN/L = 6.65 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
1.049	-5.610	-.03940	-.00650	.00670
1.049	-4.430	-.03300	-.00530	.00680
1.049	-2.250	-.02500	-.00390	.00820
1.049	-.110	-.01790	-.00250	.00920
1.049	2.010	-.00820	-.00090	.01020
1.049	4.150	.00370	.00120	.01140
1.049	6.340	.01450	.00320	.01350
1.049	-.110	-.01840	-.00260	.00920
	GRADIENT	.00421	.00075	.00052

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (RIN224) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = 40.000

RUN NO 32/ 0 RN/L = 6.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
1.103	-5.550	-.03270	-.00510	.00760
1.103	-4.460	-.02460	-.00360	.00800
1.103	-2.270	-.01370	-.00170	.00840
1.103	-.120	-.00500	-.00010	.00890
1.103	2.020	.00570	.00180	.01030
1.103	4.170	.01630	.00360	.01150
1.103	6.360	.03150	.00640	.01380
1.103	-.120	-.00380	.00001	.00910
	GRADIENT	.00470	.00083	.00042

RUN NO. 30/ 0 RN/L = 6.78 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
1.252	-5.690	.00490	.00190	.01040
1.252	-4.490	.01760	.00410	.00990
1.252	-2.290	.02940	.00630	.00930
1.252	-.120	.04320	.00870	.00970
1.252	2.050	.05220	.01030	.00950
1.252	4.240	.06020	.01170	.00960
1.252	6.440	.07120	.01350	.00950
1.252	-.110	.04490	.00890	.00960
	GRADIENT	.00495	.00088	-.00011

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 77074TS+Z13 (R1N225) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 1/ 1 RN/L = 5.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
.800	-6.890	-.07350	-.01430	-.00750
.800	-4.700	-.04320	-.00850	-.00160
.800	-2.470	-.01460	-.00320	.00430
.800	-.250	.01540	.00220	.01130
.800	1.970	.04540	.00780	.01810
.800	4.210	.07430	.01330	.02440
.800	6.440	.10420	.01910	.02980
.800	-.250	.01620	.00240	.01140
	GRADIENT	.01325	.00245	.00296

RUN NO. 2/ 0 RN/L = 6.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
.902	-7.000	-.06650	-.01310	-.00600
.902	-4.720	-.02940	-.00610	-.00060
.902	-2.480	.00790	.00090	00500
.902	-.270	.04530	.00810	.01080
.902	1.960	.08140	.01500	.01660
.902	4.210	.11070	.02030	.02170
.902	6.510	.12800	.02320	.02720
.902	-.270	.04720	.00850	.01070
	GRADIENT	.01586	.00300	.00252

RUN NO. 4/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
.995	-7.040	-.07950	-.01490	-.00310
.995	-4.750	-.04650	-.00830	.00280
.995	-2.440	-.00800	-.00130	.00820
.995	-.220	.03210	.00620	.01370
995	2.070	.07170	.01350	.01860
.995	4.290	.11110	.02160	.02310
.995	6.600	.14280	.02780	.02700
.995	-.210	.03420	.00660	.01360
	GRADIENT	.01748	.00332	.00226

MSFC TWT 622 (1A125) LAUNCH VEHICLE, 7707+TS+Z13 (R1N225) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

BETA = .000 CRBINC = .000
SPOILR = .000

RUN NO 5.0 RN/L = 6.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
1.049	-7.080	-.08880	-.01560	-.00120
1.049	-4.770	-.05040	-.00850	.00400
1.049	-2.440	-.01240	-.00150	.00950
.049	-.180	.02690	.00570	.01470
1.049	2.110	.06840	.01360	.01950
.049	4.360	.11050	.02190	.02410
.049	6.700	.14700	.02920	.02730
.049	-.190	.02980	.00630	.01490
	GRADIENT	.01765	.00333	.00230

RUN NO 6.0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
1.110	-7.130	-.08870	-.01540	-.00090
1.110	-4.810	-.05060	-.00820	.00400
1.110	-2.470	-.01090	-.00090	.00950
1.110	.190	.02990	.00660	.01480
1.110	2.100	.06950	.01420	.01920
1.110	4.380	.10870	.02190	.02290
1.110	6.710	.14470	.02900	.02560
1.110	-.181	.03180	.00630	.01490
	GRADIENT	.01739	.00328	.00237

RUN NO 7.0 RN/L = 6.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
1.160	-7.260	-.09130	-.01600	-.00050
1.160	-4.890	-.04960	-.00810	.00380
1.160	-2.510	-.00490	.00020	.00890
1.160	-.160	.03960	.00850	.01420
1.160	2.130	.07870	.01630	.01850
1.160	4.430	.11640	.02360	.02270
1.160	6.770	.14850	.03000	.02640
1.160	-.160	.04300	.00920	.01470
	GRADIENT	.01786	.00342	.00204

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (R1N225) (19 JUN 75

REFERENCE DATA

SREF = 2690.0000 SQ FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 269.0000 IN. ZO
SCALE = 0040 =

PARAMETRIC DATA

BETA = .000 ORBINC = .000
SPOILR = .000

RUN NO 3. 0 RN/L = 6.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNW	CBW	CTW
1.249	-7.290	-.07200	-.01310	.00000
1.249	-4.900	-.02560	-.00400	.00330
.249	-2.510	.01990	.00460	.00770
.249	-.140	.06280	.01270	.01270
.249	2.150	.09980	.01950	.02160
.249	4.560	.13350	.02610	.02160
.249	6.790	.16800	.03170	.02490
.249	-.140	.06530	.01330	.01260
	GRADIENT	.01698	.00352	.00199

RUN NO -2/.0 RN/L = 6.61 GRADIENT INTERVAL = -5.00 5.00

MACH	ALPHA	CNW	CBW	CTW
1.463	-7.321	-.05550	-.01190	-.00400
.463	-4.940	-.02110	-.00380	-.00240
.463	-2.540	.01910	.00380	.00030
.463	-.181	.05080	.01070	.00440
.463	2.170	.10060	.01890	.00960
.463	4.470	.13010	.02490	.01160
.463	6.810	.16100	.03020	.01660
.463	-.181	.06170	.01180	.00460
	GRADIENT	.01659	.00309	.00184

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 770775+Z13 (RIN225) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 14/ 0 RN/L = 5.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
.804	-6.450	.01890	.00290	.00730
.804	-4.330	.02020	.00280	.00880
.804	-2.220	.02120	.00290	.01040
.804	-.110	.01650	.00240	.01100
.804	2.000	.01900	.00300	.01230
.804	4.100	.02130	.00360	.01330
.804	6.210	.02480	.00470	.01510
.804	-.110	.01770	.00250	.01130
	GRADIENT	-.00000	.00008	.00052

RUN NO. 13/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
.902	-6.690	.03210	.00590	.00620
.902	-4.500	.03920	.00690	.00720
.902	-2.270	.04380	.00770	.00880
.902	-.110	.04510	.00830	.01050
.902	2.050	.05300	.00980	.01140
.902	4.250	.05550	.01040	.01320
.902	6.450	.05890	.01130	.01560
.902	-.100	.04600	.00830	.01050
	GRADIENT	.00192	.00042	.00067

RUN NO. 11/ 0 RN/L = 6.42 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
.985	-6.540	.01250	.00240	.00980
.985	-4.400	.01940	.00350	.01040
.985	-2.220	.02560	.00470	.01190
.985	-.110	.03080	.00590	.01340
.985	2.030	.04120	.00810	.01490
.985	4.150	.05330	.01040	.01570
.985	6.300	.06310	.01260	.01800
.985	-.100	.03180	.00610	.01360
	GRADIENT	.00390	.00081	.00064

MSFC TWT 622 (IA125) LAUNCH VEHICLE, 77074TS+Z13 (RIN226) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 10/ 1 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
1.044	-6.580	.00010	.00070	.01000
1.044	-4.400	.00850	.00210	.01110
1.044	-2.230	.01770	.00380	.01290
1.044	-.110	.02580	.00560	.01450
1.044	2.030	.03710	.00780	.01580
1.044	4.170	.04810	.00990	.01720
1.044	6.330	.05970	.01240	.01890
1.044	-.110	.02520	.00540	.01460
	GRADIENT	.00461	.00092	.00071

RUN NO. 9/ 0 RN/L = 6.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
1.111	-6.630	-.00050	.00080	.01120
1.111	-4.460	.01010	.00270	.01240
1.111	-2.270	.02150	.00480	.01400
1.111	-.110	.03330	.00720	.01540
1.111	2.030	.04450	.00950	.01650
1.111	4.190	.05630	.01180	.01770
1.111	6.360	.07140	.01480	.01910
1.111	-.110	.03390	.00730	.01540
	GRADIENT	.00534	.00106	.00061

RUN NO. 8/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
1.158	-6.670	.00430	.00180	.01220
1.158	-4.470	.01390	.00360	.01240
1.158	-2.280	.02450	.00570	.01320
1.158	-.120	.03740	.00810	.01430
1.159	2.040	.04950	.01060	.01530
1.158	4.210	.06430	.01340	.01640
1.158	6.400	.07890	.01610	.01720
1.158	-.110	.03910	.00840	.01450
	GRADIENT	.00580	.00113	.00047

MSFC TWT 622 (!A125) LAUNCH VEHICLE, 77074TS-Z13 (R1N226) (19 JUN 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 1307.0000 IN. XO
LREF = 474.8000 INCHES YMRP = 105.0000 IN. YO
BREF = 936.7000 INCHES ZMRP = 288.0000 IN. ZO
SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 ORBINC = .000
SPOILR = .000

RUN NO. 12/ 0 RN/L = 6.66 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
1.253	-6.690	.02290	.00550	.01220
1.253	-4.500	.03620	.00790	.01190
1.253	-2.270	.04620	.00990	.01130
1.253	-.110	.06050	.01240	.01190
1.253	2.050	.06970	.01410	.01160
1.253	4.250	.07840	.01560	.01100
1.253	6.450	.08790	.01720	.01050
1.253	-.100	.06200	.01250	.01210
	GRADIENT	.00494	.00090	-.00007

RUN NO. 43/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNW	CBW	CTW
1.459	-6.710	.03690	.00790	.00900
1.459	-4.500	.04540	.00950	.00850
1.459	-2.280	.05130	.01030	.00710
1.459	-.100	.06100	.01180	.00550
1.459	2.090	.06210	.01180	.00330
1.459	4.280	.06530	.01200	.00240
1.459	6.490	.06900	.01250	.00190
1.459	-.100	.06140	.01180	.00520
	GRADIENT	.00222	.00030	-.00073